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THE COMPARATIVE VALUE OF SOME OF THE NEWER METHODS OF THE TREATMENT OF SKIN DISEASES.*

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In comparing new methods of treatment along any line of diseases, especially when the position of the true field of such treatment is still somewhat indefinite, a consideration of such newer methods of treatment and discussion should be productive of advancement.

My purpose is to direct your attention to a practical clinical comparison of the various light treatments in the field of dermatology. It would, of course, be impossible to cover the entire field, therefore, I will consider only those forms of light and their special therapeutic application most commonly and successfully used, viz., Roentgen Rays or Radiotherapy; Finsen Light or Phototherapy; Radium and High Frequency.

That radiotherapy and phototherapy each has its distinct field in dermatological affections is becoming more clearly demonstrated every day; and that radium and high frequency each assists in the aforementioned methods of treatment in bring-

ing about best results in chronic dermatoses is now an established fact.

That these new methods accomplish results in the treatment of some chronic conditions, which all other treatments heretofore have failed to accomplish according to reports from dermatologists in different countries is most gratifying and convincing.

Before the true value of any therapeutic application can be correctly estimated it is all important that a correct diagnosis of the disease be made. This has been one great cloud on our horizon. Men who have had no special dermatological training often make incorrect diagnoses, and because of apparent financial returns use this line of treatment, thus their statistics are questioned and justly so by the dermatologists.

The questions that confront us, usually, in applying these newer treatments are: Will it cure? Will the cure be permanent? Will it be disfiguring? The light treatment is not a panacea for all skin affections, but the case that is not per-

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manently benefited is a rare one, in selected cases, and the remaining scar is the least disfiguring of any known treatment.

The stimulating effect of the sun's rays was known and applied by the ancient Romans in the early days; and to-day the acknowledged therapeutic value of light is embodied in its power of stimulating all organic life; and it is deplorable that the profession at large have been so slow in applying this powerful, stimulating agent. Instinctively, the ailing, dumb beast seeks the sun, yet how few of our otherwise well equipped hospitals are provided with comfortable, spacious sun parlors, where patients might receive the benefits of this natural, health giving remedy, the value of which to the convalescent we all recognize.

If we could send our cases of acne, psoriasis, eczema, and many other kindred skin diseases to climates in which they would get the direct rays of the sun the greater part of the year, a large percentage of them would recover with no other treatment, and there would be less tendency to recurrence than with any form of medicated treatment. This is the effect of the concentrated light treatment.

Finsen was the first investigator to exclude the painful damaging rays of the sun spectrum from those that were beneficial in their effect, and that the powerful effect of all light treatment is due to the stimulative action of the chemical rays whether sunlight, or electric, and to him all honor is due.

There still exists differences of opinions as to the action of the chemical or actinic rays upon cell structure. Some contend that the action upon pathological tissue is a destructive one, while others think that a mild inflammatory reaction by the light

will produce a normal process of repair. This, I think is the same as applying heat or cold to an inflamed mucous membrane of the eye, for instance; the effect of either is the same in the end, but one acts more rapidly than the other.

I believe both opinions as to action to be correct, and results would be obtained if the proper selection of diseases to be treated were made for there are those that will respond to mild reactions, while to apply them to other conditions would be a waste of time to both patient and operator, where pathological tissues must be destroyed.

In this inflammation whether mild or severe, the Finsen light especially, produces a sterilization of the tissues, which is not true of the X-ray. The X-ray and the Finsen light are both local, and general diffusible stimulants of the highest class. This stimulation carried to a therapeutic dose, produces a radiant cell energy, which, in character resembles a normal inflammation which is a normal process of repair, and if carried a step farther will cause destruction of the pathological cell, which is the cell of the least resistance. With the histo-pathology briefly stated, for the action of all light upon cell tissue is only a degree of stimulation, let us consider then the penetrating power of the X-ray for instance, as compared with local applications.

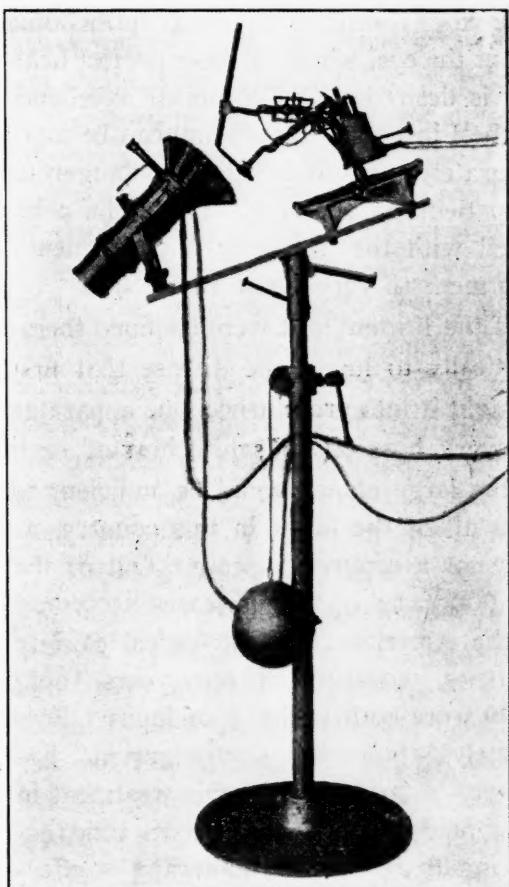
In treating any skin affection with the ray we are stimulating every cell structure of the part treated, from the periosteum of the bone, outwards, instead of trying to feed the weak, new cells about the edges of an indurated ulcer, for instance that are many of them unable to live, not to speak of their inability to take up stimulation from local medication. As soon as light stimulation is applied to

such conditions, lessening of odor and discharge is at once noticeable. This retards the death of new cells, and the stronger cells reproduce from the diffusible stimulation from within, consequently, healing takes place rapidly. We must therefore admit, after taking out the chaff from statistics of the enthusiast, that the ray is of great therapeutic importance. It is to this cell stimulation of all of the tissues under the light treatment that all superficial ulcers, lupus, epithelioma, acne, and other like chronic skin affections are happily compelled to give way.

If this stimulation from the light is continued and the vitality of the normal cells has not the power to transmit this stimulation, one to the other, an accumulative effect is produced, so that the safety limit may be easily overstepped, with destruction of new areas of healing, or necrosis of the normal tissue; therefore, great precaution must be taken with patients, whose general cell resistance is below normal, such as the alcoholic, the paralytic and the aged.

So carefully and scientifically were all of the investigations by Finsen with the light treatment made, that when he announced to the world his methods and results, neither then nor since was there anything to surpass them. Many investigators have produced smaller and cheaper apparatuses; even Finsen himself felt that the original apparatus was too expensive and cumbersome for any other work than that of an institution, and he with his assistant, Dr. Rhyn, modified the original apparatus, so as to make it practical for general use. (See in plate.) The Finsen-Rhyn lamp has power of penetration and focus equal to that of the original, with larger lenses, making it more valuable, in that a larger area may be treated

at one time. Operators of so-called modified Finsen apparatuses have been sadly disappointed in the results obtained. In my opinion they have lacked in many absolutely essential requisites for permanent results. In many of the mild dermatoses the modifications are no doubt of use, but the inability to draw a proper amount of current and improper lenses for



The Finsen Rhyn Apparatus (Finsen's last lamp).

focusing the light, and faulty compression of the part treated, results in a superficial re-action taking place before a penetrating re-action can be brought about, which is most essential. Finsen's treatment can not be conducted cheaply; the apparatus is expensive, it is expensive to maintain because it draws a large amount of current from fifteen minutes to an hour

per treatment. It demands constant attention of the operator for proper compression of the part treated, and the area treated at one time is limited, yet it is without doubt from the statistics of Finsen, Sequeira and others, the best treatment for erythematus lupus, chronic localized eczemas, and port wine mark upon which the Roentgen ray, in my experience, has little effect. It is also effectual and safe for rodent ulcer and epithelioma about the eye, when the most perfect healing is desired. The points of excellence of the Finsen are, the dosage can be more accurately measured; it is not dangerous to patient or operator. It can be combined with the X-ray or high-frequency treatment to very great advantage.

If the Finsen light were confined therapeutically to lupus, the disease that first brought it into prominence, one apparatus in every hospital or sanitorium of each of the large cities, would be sufficient to treat all of the lupus in this country, as it is not a common disease. Out of the 200,000 cases of skin diseases according to the American Dermatological Society statistics, covering fifteen years, only 1,700 were both varieties of lupus. Fortunately, however, investigation has proven the usefulness of this treatment in other fields. Up to the present time, according to reports, radiotherapy is effectual in a larger variety of chronic skin diseases, but failures are more common. The Finsen light is accredited with the greater number of actual cures as compared to the X-ray. This is no doubt due to the careful selection of the diseases to be treated by it, and the untiring scientific application made by Finsen and his early followers.

In comparing the Finsen light with the Roentgen ray, my experience has been

that the Roentgen ray is chosen for a large percentage of the dermatological conditions that require light treatment. The reasons of this are, first, because stimulation by the X-ray is more rapid; second, there is more penetration, therefore it influences the deeper structures; third, it covers larger areas of disease; fourth, it is better adapted to the treatment of ulcerative conditions and diseases of mucous membrane; fifth, the application is more comfortable to the patient; sixth, treatment can be carried on less expensively, and last, the apparatus used to excite the ray can be put to other uses. Yet, on the other hand, the agent which is the most powerful in producing good results, is also the most powerful in producing evil ones if not under proper control. The more experience one has with the ray, the more profound is his respect for its powerful action.

Besides the action of the Roentgen ray upon ulcerative and cutaneous granulomata and cutaneous affections involving the mucous membrane, it has a gratifying curative effect upon a class of diseases that have been most obstinate and rebellious to other forms of treatment. These conditions are those that attack the hair and its follicles, both parasitic and non-parasitic. In ring-worm and sycosis, sufficient application of the ray to cause prompt falling of the hair will result in a large percentage of the fungi being carried away on the hair shafts after which the diseased area may be painted with mild antiseptics, which now have ready access to the remaining fungi and the disease is cured in one-third the time of other successful management. This new form of treatment is being extensively used in European countries because of its prompt, curative action, when heretofore the treatment

has been tedious and slow. In syphilis the treatment has been equally gratifying. There are many other less common, rebellious cutaneous diseases that are amenable to the ray, that are unaffected by the Finsen light, such as mycosis fungoides, blastomycosis, scleroderma, elephantiasis and others. From the knowledge of the action of radiotherapy and phototherapy, investigators were led to apply forms of radio-activity that were known to exist in certain mineral salts, the most active of which is radium. The spontaneous emanating energy of this salt has a decided action upon living tissue, due to the actinic rays emanating from it, and resembling in action the Cathode ray. It is more rapidly transmitted than the X-ray, and its radio-activity is measured in units, using uranium as a base as the unit of measure. The therapeutic possibilities of radium are decidedly limited, and there is no question that it has been over-estimated. We have never been able to obtain the same results in this country that have been reported by the French, and its use is being gradually discarded by dermatologists. The objections to it are the small amount that can be obtained, uncertain dosage, limitations in area of application, and its enormous price, and while the indications for its application are along the same line as the X-ray, my experience has been that radiotherapy covers more perfectly any therapeutic indication of radium, with possibly one exception, the diseased condition being in a cavity.

Another form of light treatment which is as yet in its infancy is high frequency. This current is an entirely new electrical phenomenon and has been attracting the attention of dermatologists because of its undoubted assistance to the Roentgen ray and Finsen treatment. The apparatus is

so constructed as to produce the most highly interrupted current known, and one that is unpolarized. The two component parts of therapeutic value in this current are its visible spark of high frequency, and when applied through a vacuum electrode gives off actinic rays. It has a pronounced action upon the superficial sensory nerves, when applied locally, thus relieving itching and pain, and it also has a marked effect of producing an increased blood supply to the skin, thus promoting cell metabolism. Its field of usefulness is therefore in the localized, pruriginous affections. Its most specific field of action according to my experience has been in the destruction of small neoplasms, such as warts, moles, and small nevi; especially of warts of the scalp. The application is practically painless, compared with the electric needle. With a carbon point electrode, an application of from three to ten minutes will cause a wart or mole to turn black and it will in a day, fall off, with no pitting or trace of the location of the neoplasm. This new method of treatment is a great advancement over the electric needle, for it is far less painful and leaves no scar, and further, it is very useful in combination with the Roentgen ray and Finsen light. It has no doubt a field of usefulness in cutaneous affections, which is constantly gaining, but as yet its results cannot be compared to those of the Roentgen ray or Finsen light.

Let us now consider the older methods used in treating these diseases before the light treatment was known, namely, excision, curetting, scraping, cautery and caustics; in my judgment, there is no comparison between these and the newer methods which have been briefly outlined. I do not wish to infer that these older methods should be or can be wholly dis-

carded, for they are of constant assistance to the light treatment in bringing about a more prompt removal of pathological conditions on portions of the body, where the scarring is of little importance to the patient. The disadvantages of the older methods are that they are painful; the remaining scars make them objectionable on exposed parts of the body, such as the hands and face; they are unable to reach all of the diseased tissue, and they expose new areas to infection.

CONCLUSIONS.

The Finsen light is not only the safest of these methods in its application to the

patient and operator, but it is credited with the greatest number of actual cures. The original apparatus is superior to all modifications of it, thus far. The Roentgen ray covers the largest field in the treatment of cutaneous diseases. Radium and high frequency are of special assistance to both radiotherapy and phototherapy. All four can be advantageously combined in the treatment of chronic, cutaneous diseases, specially selected.

These general comparisons are based upon the personal application of the light treatment in 490 cases.

A CASE OF MALFORMATION OF THE INTERNAL GENITALS WITH THE REPRODUCTIVE GLANDS IN THE LABIA MAJORA.*

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Congenital deformities of the internal genitalia, while not uncommon, are sufficiently rare to make each case interesting both to the specialist and to the general practitioner. By far the greatest number of gross deformities of these organs may be classified under some division of hermaphrodisim, or pseudo-hermaphrodisim, but there are cases in which the external genitalia are so perfectly formed and in which the internal organs vary so markedly from the normal that one is unable to determine the sex of the individual without microscopic examination of the reproductive gland.

Through the kindness of Doctor Reuben Peterson, I am enabled to report the following case, which entered the gynecologic service of the hospital of the University of Michigan:

Patient is 15 years of age and enters the hospital for pain in the lower abdomen and inguinal region and for a failure of the menses to appear. The father is living and is in good health, but the mother has had fainting spells with the menstrual flow since puberty. One sister died of tuberculosis, but the remaining brothers and sisters are in good health. None of the sisters gives a history of abnormal menstruation and one sister has had two children.

The patient was well until she was 13 years old, when she began to have headache and pain low down in the abdomen.

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She has had scarlet fever and measles, but made good recovery from each.

Menstruation has never appeared. She had a slight discharge in January, 1904, white and thick, which she thought was leucorrhœa. The appetite is not good, digestion is poor, bowels are constipated and bladder negative.

In January, 1903, the patient began to have pain in the lower abdomen and a little to the right of the median line. This pain came on at irregular intervals. It was cramping in character and located in the region of the umbilicus, lasting one and one-half to two days. The pain each month was of the same severity until December, 1903, and occurred about the twentieth of each month. She was not confined to bed during these attacks but complained of dull headache and tired feeling. Since December, 1903, the pain has been almost constant with intervals, sometimes, of two or three days. It extends farther down in the pelvis and to the right of the median line. In the last part of January, 1904, the patient noticed a mass in the right inguinal region, hard and slightly painful on pressure. A week later she noticed a similar mass in the left side. No history of injury could be obtained. These masses would disappear for a few days at a time and then reappear. There has been no evidence of vicarious menstruation.

Physical examination shows the patient to be 5 ft. 2 in. in height and weight 90 pounds. She has lost 14 pounds in the last six months. She does not look well. There is a slight flush about the cheeks, the mucous membranes are pale, and the cheeks are slightly sunken. The sclera is clear and shows a bluish tinge. The hair is brown, of fine texture and long. The face is distinctly feminine. The frame is

small and the skin moist, elastic and shallow. Panniculus is thin, musculature small but firm. The dental arch is high and the teeth poorly kept though regularly set in upper and lower jaws. The skull is square and the brow protrudes. There is a slight asymmetry in the development of the ears. Mental development is good. The voice is feminine.

Chest—This is narrow and long, but not deep. The clavicles and ribs are prominent. The epigastric angle is narrow. The breasts are well developed, the areola distinct and nipples elevated. Percussion and auscultation show suspicious signs of tuberculosis, although the sputum examination is negative. The heart is negative.

Abdomen—Above the level of the ribs, and the umbilicus protrudes slightly. The veins are enlarged in each iliac region. There is tympany all over the abdomen except in the lower left quadrant, where it is somewhat dull. There is tenderness upon palpation and percussion. The abdominal muscles are rigid.

External Genitals—The pubic hair is present. The mons veneris, clitoris, meatus urinarius, labia majora and labia minora are absolutely normal for a girl who has not reached puberty. The hymen is ruptured and the finger can be passed into the vagina. Ether was given to render the examination more complete. Upon straining under the anesthetic two masses appeared, one in the upper part of each labium majus. Each is about the size of a small English walnut, soft and compressible, but distinctly outlined as one body. These bodies can be readily moved and slip under the finger like normal ovaries. Attached to the upper portion of each body is a round, soft, slippery cord, three to four millimeters in diameter.

The right external ring admits the forefinger with ease and the left ring is somewhat larger. There is no cremasteric reflex.

Rectal examination shows two tightly stretched bands from either side of the sacrum which meet behind the pubes. There is an apparent absence of the uterus. Examination with the sound in the bladder and the finger in the rectum, shows that there is no body that might be taken for a uterus. In the region of the sigmoid are irregular masses feeling decidedly like enlarged glands and adhesions. No ovaries or tubes could be made out. The vagina admits the forefinger and is 5 centimeters in length. It is lined by mucous membrane and terminates in a cul de sac. There is no suspicion of a cervix.

The morning temperature varied from 98° to 98.8° and the evening temperature from 99.2° to 100° during her stay in the hospital.

The diagnosis of tuberculosis of the lungs, tuberculous peritonitis and either pseudo-hermaphrodisim *masculinus externus*, or bilateral inguinal hernia of the ovaries with an aplasia of the uterus was made. An operation was advised but unfortunately was refused.

The term hermaphrodisim is applied to a class of deformities in which persist certain elements of the genital organs of both sexes. A large proportion of the congenital deformities of the genital tract are included under this term.

According to the classification given in Ziegler's Pathology, hermaphrodisim may be divided into true hermaphrodisim and false, spurious or pseudo-hermaphrodisim.

True hermaphrodisim or *hermaphrodisim verus* may be of three kinds—lateral, bilateral or unilateral.

In *lateral hermaphrodisim verus*, there is present an ovary on one side of the body and a testicle on the opposite side. It is claimed that individuals of this kind have been known and such cases have been reported by Meyer, Schmorl, Banon and others. Obolonsky has shown by careful dissections and histologic examination that he had a case of this kind.

Bilateral hermaphrodisim verus may be defined as the presence of both an ovary and a testicle on both sides of the body. It is doubtful if any such condition has ever been found. Heppner describes such a case in a premature, malformed infant whose external organs were those of a female. The internal organs consisted of a rudimentary uterus, rudimentary vagina, normal ovaries and tubes. Near each ovary was found a body containing tubules radiating toward a hilum. He supposed these to be testicles. Garré has recently reported a case which may belong to this class.

In *unilateral hermaphrodisim verus* there are a testicle and ovary on one side of the pelvis and either a testicle or an ovary on the opposite side. Blacker and Lawrence have found such a condition in a fetus.

Pseudo-hermaphrodisim is much more common than *hermaphrodisim verus*. It is the result of the persistence of some of the embryonic structures, which have failed to undergo atrophy as in the normal individual. It is characterized by bisexual development of the external genitals and genital passages, with a unisexual development of the essential sexual gland.

Pseudo-hermaphrodisim may be either masculine or feminine and of the internal, external or complete variety.

In *pseudo-hermaphrodisim masculinus internus*, the external genitals are either

well developed or deformed and are of the male type. The individual also possesses a vagina and, in some cases, a uterus or even tubes. The sexual glands are testicles.

In *pseudo-hermaphrodismus masculinus externus*, the external genitals, only, depart from the male type and more or less completely resemble the female.

Pseudo-hermaphrodismus masculinus completus is characterized by having a vagina, uterus, and tubes more or less complete or in a rudimentary state. The external genitals resemble the female organs. The penis is usually in a condition of marked hypospadias and the urethra and vagina open by a common orifice. Other varieties of this type are seen. The sexual gland is testicle.

In *pseudo-hermaphrodismus femininis internus*, the external organs are female and, together with the ordinary internal organs of the female, are found rudiments of the Wolffian ducts.

Pseudo-hermaphrodismus femininis externus has external genitals more or less resembling a male, while the sexual gland is ovary.

Pseudo-hermaphrodismus femininis completus has external organs resembling the male, a persistence of parts of the Wolffian body, and the sexual organ is an ovary.

The case reported, provided the glands in the inguinal canals are testicles, is one of *pseudo-hermaphrodismus masculinus externus*. The formation of the external genitals varies markedly in this class. By far the greatest number are cases of hypospadias, in which the clitoris is abnormally developed. The urethra is represented by a groove on its under surface. The clitoris may attain the size of the normal penis. Hundreds of cases of this kind

have been reported. Next in frequency are those cases in which the external genitals conform exactly to the female type but the vagina and hymen are totally absent. Much more rare are those cases in which the hymen and vagina are present and the external genitals are apparently those of a normal individual.

Mundé, in his article in the *American Journal of Obstetrics* for March, 1899, was able to collect only five cases of this last class. These were reported by Leopold, Ricco, Steglehener, Giraud and Chambers. I am able to add to this list cases by Braun, Dixon Jones, A. Martin, Poore, C. Martin, Snequirjow, Solowij, Delagénière, Buchanan, Polaillon, Harris and Demars. In all these cases the external genitals were female,—the clitoris was not enlarged, the meatus was in normal position and the hymen and vagina were present. The uterus, tubes and ovaries were absent and the glands in the inguinal canal were proved to be testicles by microscopic examination.

The case reported by Polaillon in 1885 may be taken as a type of the above cases. The patient was 25 years of age. She has never menstruated and has never had any menstrual molimina. The external genitals are well formed and are like those of a normal female. The clitoris is not enlarged and the meatus is in normal position. The vagina is 2 centimeters in length. Rectal examination with the sound in the bladder shows an entire absence of the uterus. At either external abdominal ring is an oval body, movable and incompletely reducible on the right side, while it is completely reducible on the left. These glands were supposed to be ovaries. The patient died from nephritis in 1887. At autopsy, the uterus was found to be absent and was replaced

by a thin band of muscle back of the bladder. No tubes or ovaries were present. The glands in the inguinal canal were proven to be testicles by histologic examination.

The earliest authentic cases of ovarian hernia were reported by de Gouey (1716), Pott (1756), Deault and Deneaux. Since then many articles and monographs have been written on this subject. In the *Annals de Gynécologie* for 1879, Peuch has collected 86 cases of inguinal ovarian hernia. Of these, 54 were congenital, 16 were accidental and 16 were questionable. Of the 54 congenital cases, there was deformity of the internal generative organs 33 times. In 4 cases there was a bi-horned uterus, in 13 feminine hermaphrodismus and in 16, absence or gross defect in the development of the uterus. Double ovarian hernia was congenital in nearly every case and was associated with absence of the uterus or feminine hermaphrodismus. The ovary was always found with the tube in congenital cases while it was found alone in cases of acquired hernia. He says, "It is rare to mistake an ovary for a testicle in the inguinal canal, because, if the external genitals are well formed the gland is probably ovary. With testicles in the canal, there is usually some deformity of the external genitals, especially the clitoris."

This conclusion differs markedly from Swasey, who says, "It is far more probable that congenital tumors of the groin are testicles than ovaries, and no case should be accepted as ovaries unless the evidence on the point sets it beyond cavil."

Congenital hernia of the ovary is analogous to the normal descent of the testicle. The round ligament is the essential agent. Normally, the Müllerian ducts fuse to form

the uterus. The canal of Nuck remains patent until the seventh or eighth month of fetal life. The ovary descends from its place of development as does the testicle, but the anlage of the round ligament of the ovary fuses with the uterus to form the ovarian ligament. This arrests the ovary in its descent and the gland is drawn toward the uterus, away from the inguinal canal. In the testicle, the anlage of the gubernaculum testes is attached to the skin, making its exit from the abdominal cavity by way of inguinal canal. The body grows more rapidly than the gubernaculum and consequently the testicle descends in the abdomen and is drawn through the inguinal canal and finally into the scrotum. If Müller's ducts fail to fuse, no uterus is developed and consequently the anlage of the round ligament has no fusion and no place of attachment other than the normal attachment of the gubernaculum testes. The ovary descends and is drawn through the internal ring before the canal of Nuck closes and a congenital hernia is produced.

I have been able to collect 9 cases of double ovarian inguinal hernia with apparent or total absence of the uterus. In each case the external genitalia were those of the normal female. The vagina and hymen were present. These cases were reported by Guerisant, Nicaise, Holmes Coute, Rheinstaedter, Boinet, Bezancion, Werth, Parker, and Cazeaux. Other cases are mentioned in literature but they either exhibited some deformity of the external genitalia or the cases referred to could not be found.

The case reported by Bezancion may be taken as a type of these cases. The patient was 38 years of age. There was a family history of tuberculosis. The pa-

tient is married but has never menstruated. Coitus is normal. She shows evidence of cachexia and advanced pulmonary tuberculosis. She died after three days of observation.

At autopsy distinct lesions of pulmonary tuberculosis were found. There was an absence of the left kidney and evidence of tuberculous peritonitis. The vulva and clitoris were normal. The meatus was in normal position for a female. The vagina was 4 centimeters long and terminated in a cul de sac. Hymen tags were present. There was a small bundle of muscle fibers back of the bladder supposed to be the remains of the uterus. There was an inguinal hernia containing some of these fibers, an ovary and a tube. Microscopic examination of the sexual gland shows Graafian follicles. There is a sclerosis of the right ovary.

The following is a case reported by Swasey in which no microscopic examination was made. The patient is 46 years of age and single. There is nothing in feature, form, or face to suggest that she is not a woman. There is no beard, the skin is soft, the complexion fair and the voice feminine. She has never menstruated and there has been no vaginal discharge. She has never had any pelvic pain. The breasts are normal and of the female type. The nipples are perfectly formed and the shoulders and chest are female. She was ruptured at 25, a double inguinal hernia being produced. Below the hernial masses are irregular bodies, one on the right and one on the left, the size of pigeon's eggs. They have the feel and consistency of five-year-old testes. There is a cord from each body to the external abdominal ring, feeling like a spermatic cord. The tumors are irre-

ducible, have never been painful and have always occupied their present position. The pelvis and thighs are of the female type. The mons veneris is not prominent but pubic hair is present. The vagina is 3 inches long and is perfectly formed. The hymen is perfect; the clitoris normal. There is no trace of a uterus. The patient is of female build. This case was seen by Paul F. Muné and T. Gaylord Thomas. Mundé considered the glands testicles, while Thomas was equally sure that they were ovaries. No operation was performed.

From the cases collected, I think that one is not justified in making a diagnosis of either ovarian hernia or hermaphrodismus until the gland has been examined microscopically. I have collected 24 cases showing practically the same condition upon physical examination,—feminine habitus, feminine external genitalia and glands in the inguinal canal. Of these 24 cases, 9 proved to be ovarian hernia and 15 pseudo-hermaphrodismus masculinus externus.

I think, in making our diagnosis, we must agree with Doctor Robert Barnes, who says that cases of this class of pseudo-hermaphrodismus and ovarian hernia are closely related and that such individuals should be called "neuters" or "missed sexual determination."

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INJURIES TO THE PARTURIENT CANAL DUE TO CHILDBIRTH; THEIR CAUSATION, DIAGNOSIS AND TREATMENT.*

JAMES E. DAVIS,
Detroit.

An examination of the literature reveals an astonishing diversity of opinion touching almost every phase of repair work in the parturient canal. A variety of methods are proposed for the restoration of the perineum and each year gives additions to the list. This is conclusive proof that we have not one method that even the majority are satisfied with, when it becomes necessary to perform the secondary operation of carefully dissecting out retracted ends of lacerated muscles that have become atrophied, and properly unite the same, thereby restoring support and function. That all of such injuries could have been prevented or repaired in the early puerperium is the argument of this paper.

A better and clearer appreciation of the subject is obtained by examining the important anatomical facts as given by Marcy (1).

The parturient and fecal canals are supported in the pelvic basin in close apposition. The *pelvic floor* is so formed

and blended about these openings that it not only *supports* these canals, but also *materially aids* them in their *physiologic functions*. In intimate relation to both are the bladder and uterus in their ever-varying functional activity, and each is surrounded by a delicate plexus of nerves and vessels. The vulvar organs are all intimately blended with and go to form a part of the perineum proper. On each side of the vaginal orifice are the erector clitoridis, the bulbocavernosus and the transversus perinei muscles, and these with the levator ani, make up, in large measure, the pelvic floor. The bulb vaginal and Bartolinian glands are covered by these muscles with their erectile plexus of vessels and abundant distribution of lymphatics and nerves.

The erector clitoridis and bulbocavernosus muscles, with the transverse perinei, join on each side to constitute the ovate muscular vaginal orifice, and in their conjoined action perform a very important physiologic function in sexual congress. Their impaired function frequently underlies certain reflexive nervous conditions, distinctly pathologic, that are the cause of much suffering and unhappiness.

The superficial perineal fascia in its deep layer covers and incloses the trans-

*Read before the Section on Obstetrics and Gynecology at the annual meeting of the Michigan State Medical Society at Grand Rapids, May 26, 1904, and approved for publication by Committee on Publication of the Council.

(1) Henry O. Marcy, M. D., *J. A. M. A.*, October, 1903

versus perinei muscles, forming strong ligamentous transverse bands, uniting in the perineum, designated by Savage as ischio-perineal ligaments. The pubococcygei acting in unison with the other muscles of the pelvic floor, draw forward, and thus aid not only in closing the rectum, but in holding both it and the vagina in the anterior curve, so important to be retained for the preservation of normal function. The deeper fibres of the pubococcygeus unite in a loop behind the lower border of the rectum, holding it from its fixed point at the pubes, as in a sling. This loop is connected with the transversus perinei, bulbocavernosus, erector clitoridis, sphincter vaginæ and sphincter ani muscles by strong layers of connective tissue, the importance of which, for union and support, can not be readily estimated.

On the posterior wall of the vagina, in its lower third, longitudinal muscular fibres are found external to the circular layer, and these intimately blend with the pubococcygeus, giving a firm support to the vaginal outlet. The physiologic action of the muscles, thus grouped, serve to draw the rectum forward toward the pubic arch, which largely explains why the circular fibres of the vagina intra-fold laterally. The intra-folding of the vagina at right angles to the vulvar outlet is very important in its relationship of support to the uterus and its appendages.

"It is to be remembered that the direction of the normal vaginal canal for a distance of from one-half to three-quarters of an inch within the line of the hymen, is upward and backward, and from this point the so-called perineal angle, almost directly backward. It is at this perineal angle that the levator and its layers of fascia lift the canal forward or upward,

and *it is at this point* also that *separation* of the muscle and of the fascia usually occurs." (2.)

Whenever pathological findings suggest unmistakably a preventive etiology our duty is made very clear. The pathologic changes in the structures forming the parturient canal are due, in about 90 per cent. of cases, to injuries received during childbirth. The injuries at the vulval outlet that are of any consequence occur, in nearly every instance, during operative deliveries, as a result of impingement upon the tissues with forceps handles, or the blades acting as a cutting agent by being held at an angle with the outer portion of the birth canal during the last act of expulsion.

The instrument should be removed or made to assume the same axis as the lower part of the birth canal, and every care must be used while exerting traction, to save the surrounding tissues.

The injuries within the vagina are most frequently found in the sulci, and they may or may not involve the overlying mucosa. The instrument blade, when held at an angle to the vagina axis, is here a frequent causative factor in the variety where the sulci mucosa is broken.

But when the submucous separation or overdistension occurs we have a condition usually resulting from a long and tedious second stage that might have been prevented by assisting the delivery with forceps. The rent at the sulcus usually extends deep enough to involve more or less of the fibres of the levator ani (which is essentially the pelvic floor) but the perineum proper may not have even the slightest laceration.

A slight median laceration of the perineum may extend from the sphincter ani

(2) James Hawley Burtenshaw, M. D.; *The N. Y. Med. Jour.*, Jan. 10, 1903.

muscle to one inch up the posterior vaginal wall without involving the supporting structures of the perineum or pelvic floor. The deeper median tear involves the sphincter ani and the recto-vaginal septum (but not the supporting structures of the pelvic floor), resulting in incontinence of feces and diversion of the same into the vaginal outlet.

when existing in only a slight degree, in no way give subsequent trouble, and when the tear is extensive enough to cause considerable hemorrhage, marked eversion of the os, or a large amount of cicatrical tissue, then the question of preventative etiology is an important consideration. The application of forceps before complete dilatation has taken place, and too

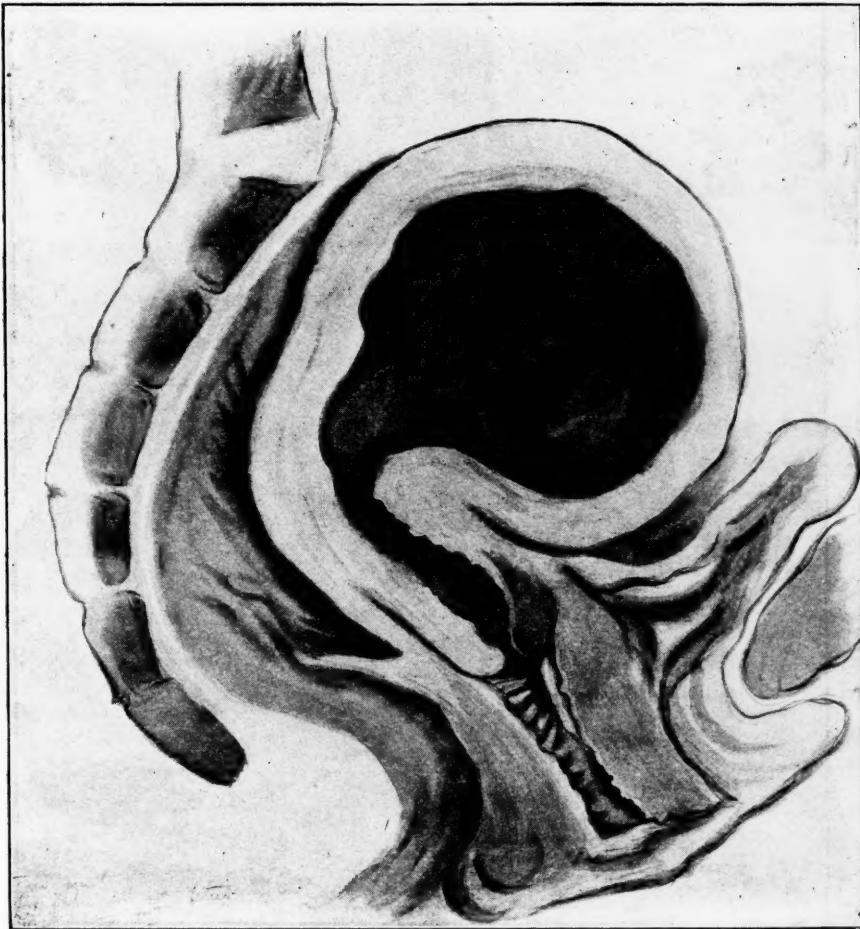


PLATE I—Uterus just after Expulsion of Fetus.

It is well to keep in mind that every perineal tear begins on the inside, and that an outside tear without one inside is indeed rare. We have here suggested that the best procedure in repair work is to begin at the starting point of the tear.

It is an accepted fact that all cervices in parous women show some form of single, bilateral or stellate lacerations and,

rapidly delivering, is a fruitful source of this injury.

Briefly stated, the pathology of the perineum, due to lacerations, includes rectocele, cystocele, enterocele and subinvolution of the vagina, while that of lacerations in the cervix uteri include exposed and inflamed cervical mucous membrane, subinvolution of the uterus, endometritis,

excessive scar tissue, pelvic lymphangitis and lymphadenitis (3).

The sequelæ of the foregoing pathological condition offer for serious consideration many of our most difficult gynecological problems. The inherent difficulties presenting are: (a) inability to completely restore lacerated tissues because of retracted muscle fibres and consequent

livery is usually treated with indifference. We have no parallel in the domain of surgery (to which obstetrics unquestionably belongs) of any other capital operation being done with such unpreparedness on the part of the operator, patient and assistants. Without a careful aseptic preparation, the necessary detail required in making a thorough examination of the

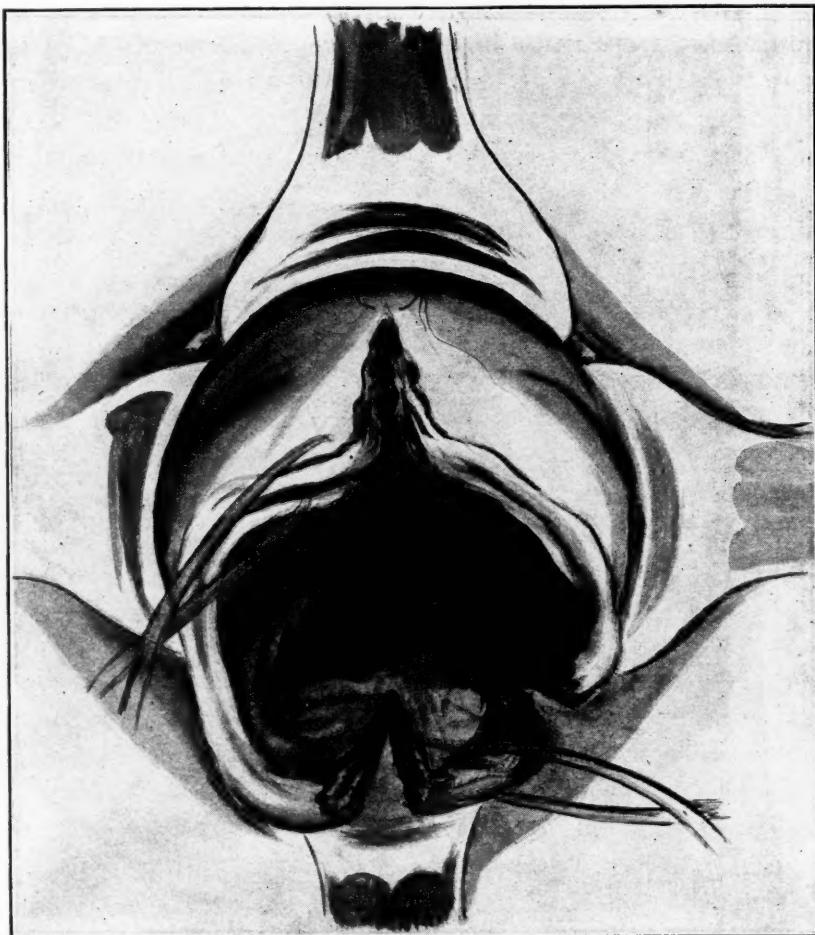


PLATE 2.

atrophic changes; (b) impossibility of correcting neurotic habit, errors and functional changes.

The successful repair of injuries of the parturient canal demands a preparation equal to that of a laparotomy. The dignity and importance of an obstetric de-

birth canal immediately, or within 48 hours after delivery, is fraught with especial danger.

It is a primary essential in practicing careful obstetrics, to insist upon a thorough examination of the cervix, anterior vaginal wall, posterior vaginal wall, pelvic floor and perineum. If this examination becomes a routine habit with the

(3) Penrose, *Text Book of Diseases of Women*, pp. 85, 151.

operator, greater care is at once insured in the work of delivery. When each injury is fully appreciated and the cause diligently sought for, it follows that greater care will be exercised and faulty methods will be changed by our own original work.

Before commencing an examination, a careful aseptic preparation should be

the feet can be allowed to rest upon two chairs.

The cervix is first examined; a double tenaculum forceps is introduced with the index and second finger as a guide to the anterior lip which is grasped and drawn into view, the posterior lip is now seized with a second pair of forceps and drawn fully down and conveniently to one side

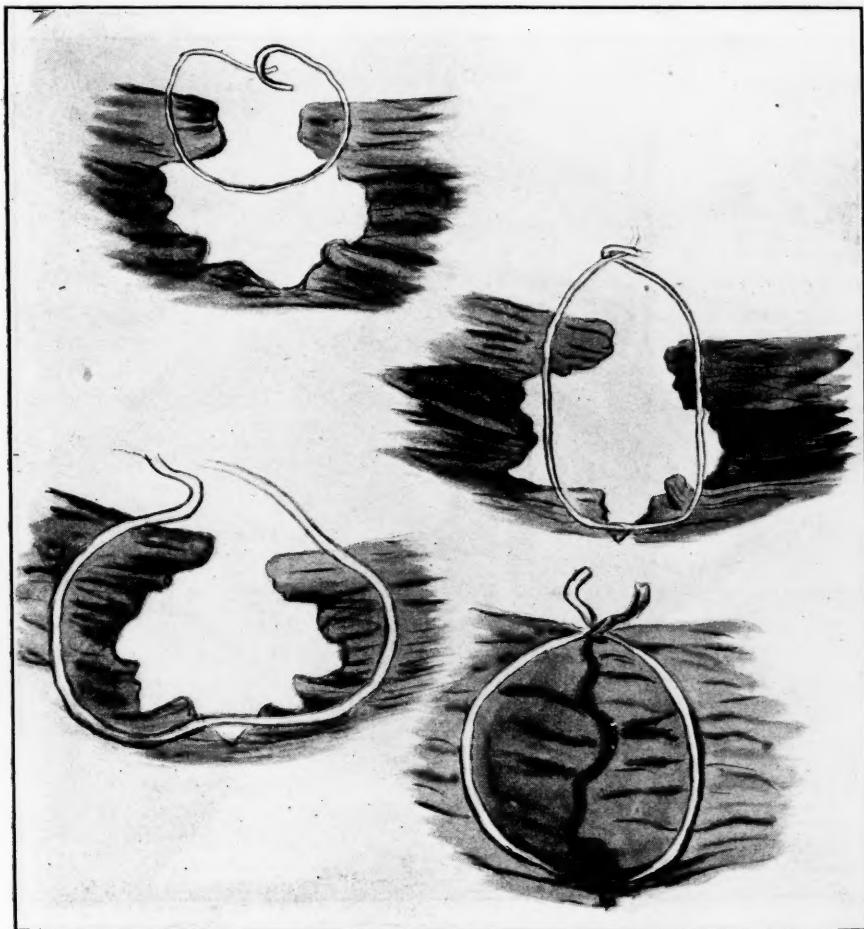


PLATE 3.

made. The obstetrician should wear rubber gloves. A half gallon or more of hot sterile water, or saline solution, should be suspended conveniently for washing the field, and the patient is placed upon a table or across the bed with the hips in a Morrison or Kelly pad placed at the edge for convenient drainage. The legs may be supported with a Kelly leg holder, or

for inspection. The lateral wall and floor of the vagina are separated with retractors as shown in drawings 2, 4, 5 and inspection or repair made as illustrated. If there is hemorrhage, the first stitch is introduced just above the angle of the tear 2 and 5. All stitches are placed so as not to encroach upon or enter the uterine canal, and are tied tightly so that

the involution in the muscle wall will not cause them to hang as ringlets. The canal is carefully examined as a precaution against possible narrowing from misplaced stitches.

The suture material used for the cervix lacerations, as well as all other tears in the canal, is 20 day, chromic cat-gut No.

1. This is found to absorb in from 10 to 15 days and does not require

II. Infection is less liable to occur when the torn surfaces are approximated.

III. The amount of scar tissue is minimized.

IV. Involution is delayed, and permanent hypertrophy may result, causing eversion of the lips, endometritis, and cancer, when deep tears are neglected.

V. A secondary operation with all its entailing inconveniences, responsibility

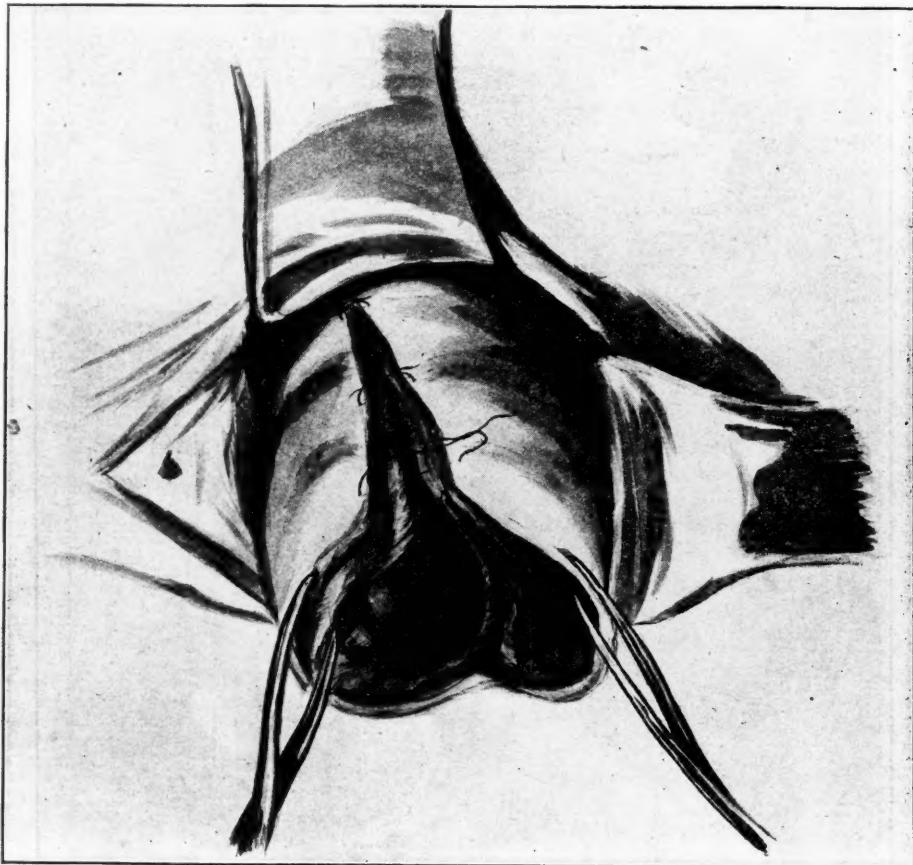


PLATE 4.

removal and possesses a desirable elasticity, which is an important quality when the muscle is atrophying.

The following reasons are advanced in favor of immediate repair of the cervix (*i.e.*, within 48 hours after delivery):

I. An extensive laceration is almost always followed by considerable hemorrhage, which is positively controlled by properly placed sutures.

and preceding suffering from existing pathological changes is avoided.

VI. It is an inviolable principle in surgery that the earliest possible repair of wounded tissues is the best conservation of the part.

VII. The obstetrician prevents an almost inevitable opprobrium of the patient and her friends for leaving her unrepai

Prof. B. C. Hirst⁵ reports that in the maternity department of the University of Pennsylvania not one of the women delivered in that institution is allowed to leave (if she accepts their advice) with any of the injuries of childbirth unrepaired, and he further says: "All injuries of the cervix have been repaired, without exception, for several years. The results

lege, reports that he closes every laceration of whatever form, immediately after labor, with the result that in the large majority union has been good.

In considerable work I have done at two maternity institutions, and that of my private practice, with the addition of associate work with my friend, H. Wellington Yates, M. D., I am led to conclude

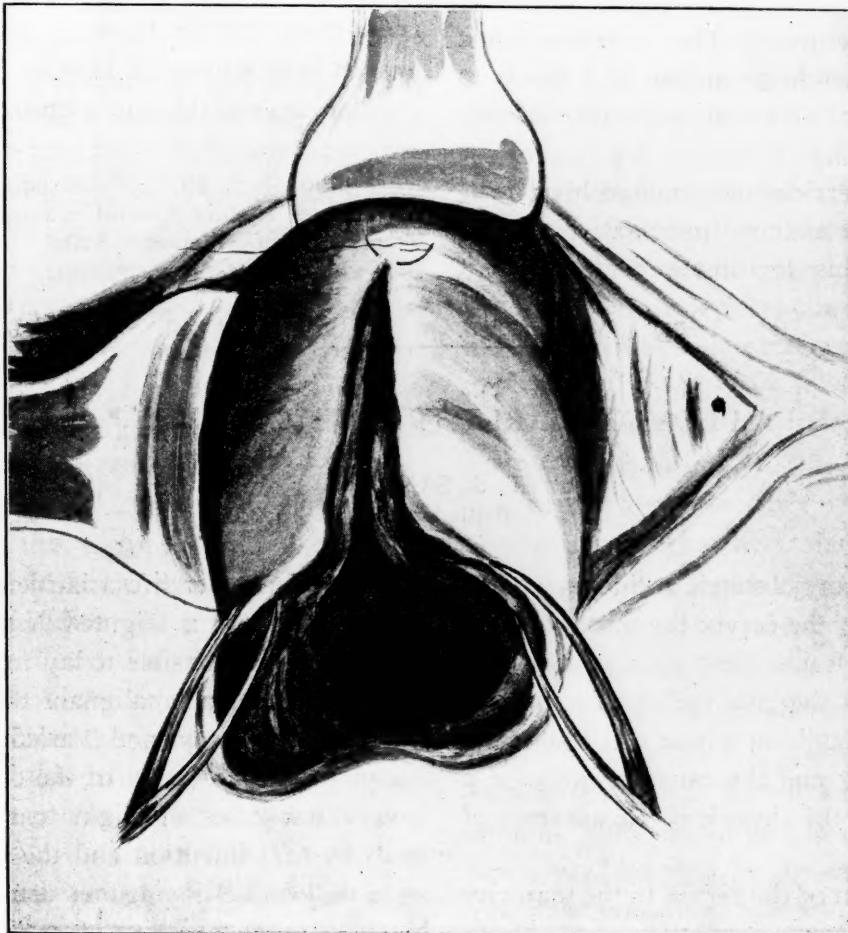


PLATE 5.

have been so satisfactory that the practice will be continued. It must become general, not only in hospital, but also in private practice."

Stricker Coles, M. D.,⁴ Demonstrator of Obstetrics in Jefferson Medical Col-

that complete immediate repair work in the birth canal should be done where the conditions admit of aseptic preparations and satisfactory assistance, in all cases within 48 hours after delivery.

The frequency of lacerations of the pelvic floor and perineum is estimated by authorities as ranging from 25 to 50 per

(4) Stricker Coles, M. D., "The Immediate Repair of Lacerations after Labor, *American Journal of Obstetrics*, March, 1904.

cent. in primiparæ and from five to ten per cent. in multiparæ.

When injuries of the anterior and posterior vaginal walls are included this percentage will be low.

The essentials necessary in successful repair work in the vagina proper is a practical knowledge of the mechanics of the muscular structures with immediate approximation in direct apposition of like tissue structures. The importance of bringing muscle to muscle and fascia to fascia cannot be too strongly emphasized. (See plate 3.)

The obstetrician has limited his art, he has only an assumed prerogative of control over his legitimate field, when it

should be his duty and opportunity to do not a part but all of his obstetrical operations.

When all repair work is fully and efficiently done, we will have the system which Prof. Hirst⁵ says, if elaborated, would ensure women a practical immunity from all the ill consequences of chilbearing—which is perfectly possible—as great an advance will be made in medicine as has yet been witnessed, ranking with vaccination, anaesthesia, and asepsis.

(5) Prof. B. C. Hirst, Philadelphia, "The Importance of a More Careful examination and Treatment of Women After Childbirth." *American Medicine*, Nov. 29, 1902.

A PLEA FOR EARLY TRACHELORRAPHY.*

T. S. SANDS,
Battle Creek.

Of the many obstetric accidents we find laceration of the cervix the most common and at the same time so frequent that laceration is the rule rather than the exception, a condition whose evil results are far reaching and the causing factor of a majority of the chronic pelvic ailments of women.

Laceration of the cervix in the majority of cases prevents involution and often times indirectly, by being a source of infection, result in peritonitis and metritis and in various ways are productive of the many reflex neuroses that render her a semi-invalid, a nervous wreck, if you

please, making her life a burden and her future existence a blighted hope. This condition is responsible today for at least 90 per cent. of all malignant diseases of the cervix. Many and varied are the symptoms of laceration of the cervix. In a very few cases of slight tears, nature heals by first intention and the patient is soon well and enjoying her usual health, but in a great majority of cases we find different conditions. Nature utterly fails in her attempt to repair the tear. The lacerated cervix presents, upon examination, an inflamed, angry appearance. It becomes eroded. From it a copious discharge of mucopus is found and a large, heavy, boggy, sub-involved uterus is the result. The patient suffers extremely from backache, dragging pains; she is

*Read before the Section on Obstetrics and Gynecology at the annual meeting of the Michigan State Medical Society at Grand Rapids, May 25, 1904, and approved for publication by Committee on Publication of the Council.

more or less hysterical, troubled very much with leucorrheal discharge, coition is painful, and she submits to her husband only from the sense of duty. Painful, irregular menstruation sooner or later develops and the patient's condition goes on from bad to worse until every organ in the pelvis is more or less diseased, and until she has eked out a miserable existence, probably several years following the time of the accident, and then after taking tonics, local treatment, and more or less faith cure, and run amuck many species of quacks, undergoes an operation for the repair of the lacerated cervix, which, at this time, I must say from my experience of several hundred cases I have operated upon, I find but a very few are restored to health and not many even benefited. Taking into consideration the number of women who are lacerated at confinement and the evil results following, it is time we ask ourselves what is the prophylaxis, for certainly this picture would indicate the sad need of some etiological prevention that would lessen the many complications of parturition. We must admit that the late repair of the cervix does not remove or overcome the many lesions brought about by this pathologic condition, or, I should say, this neglected obstetric accident.

How can we prevent the untoward results of cervical lacerations that render so many women chronic invalids? I believe the pathologic findings of this condition and the fact that the late repair of the cervix does not accomplish the desired result, not only warrants us in performing "early trachelorraphy" but demands it of us as a duty to our patients. In speaking to early trachelorraphy I do not wish to be understood as advocating the imme-

diate repair which I think is unwise and dangerous, as the cervix cannot then be outlined and there would be more or less danger from infection from retained clots, the inability for the lochia to escape as it should, and the danger of after pains tearing out the stitches. I believe in all cases when there is no fever or local infection that the cervix should be repaired as early as the twelfth or fourteenth day. By this time involution has taken place sufficient to outline the cervix and observe the extent of the tear. By early operation we materially aid nature in the process of complete involution, prevent that low type of pelvic infection that is always present when there exists a laceration, and we find the patient convalesces more rapidly and her general health is preserved as readily as it naturally would be following a perfectly normal labor that is free from parturient accidents.

I realize that the early repair of the cervix is somewhat at variance with the teachings of our text books and the practice of many of our ablest obstetricians, but, nevertheless, I believe the objections are purely theoretical. Some say that by early repair of cervix we may possibly subject the patient to unnecessary operation, as many lacerations heal by first intention. This may be the case in a very few instances, but a tear that has not united in twelve or fourteen days never will. And again we find some offering objections to the early operation that the exposure of the cervix and the passing of sutures increase the danger of septic infection. Experience proves this objection to be untrue, if the patient is aseptically prepared for a vaginal operation, for certainly no condition could more favor sepsis than the already raw, angry, and un-

healthy surface of the laceration itself. In fact, one of the important objects is to prevent early infection. Done under the regular antiseptic precautions there is little or no danger. I have performed early trachelorraphy several times, and in every case have been more than pleased with the results. Union takes place rapidly; involution continues in a normal way, and in a short time we find a perfectly healthy and normal condition of uterus.

Ordinarily the early repair of cervix is exceedingly easy of performance after the ordinary aseptic preparation for any vaginal work. All that is necessary is simply to remove the soft granulations with a sharp curette and the apposition of the surfaces is complete. The tissue being soft, the stitches are passed with the utmost facility. I use carbolized catgut sutures and find they do the work very nicely. So slight and painless is the operation that I seldom ever find it necessary to give an anesthetic, differing very materially from the late operation when dense cicatricial tissue partially fills in the gaping tear. When we consider the extent of the pelvic disorders of women that are directly traceable to parturient accidents and especially, I may say, to lacerations of the cervix uteri, we are forced to admit that obstetric art has not made the progress that it should to keep pace with

other branches of medical science, or that the obstetrician has become more neglectful of his duty. Before the period of asepsis and antisepsis in parturition, and the assistance of trained nurses, and when infection ran rampant and every deviation from the normal was considered as the result of "meddlesome midwifery," but at the present time, I am sorry to say, the woes and anguish of child-bearing are very much intensified from the fear and dread of the many complications that follow in after years and which are the direct result of the neglected accidents which should have been looked after at the time by the obstetrician. So we find that as obstetricians a serious responsibility rests upon us. The life, health, and future welfare of the patient depends largely how well we do our work. It is a fact that at least one-half of the routine office work of the gynaecologist of today is women suffering directly or indirectly from the results of the negligence of the obstetrician.

It is the duty of the obstetrician in each and every case to examine the patient at least as early as the tenth day, and if he finds a lacerated cervix, to repair it or attend to any other accident of the parturient canal that he may find present, so that before he dismisses the patient from his care she is left free from all accidents of child birth, and not until then do his duties and obligations in the case cease.

Graves Disease and Parathyroid Therapy.—James J. Walsh (New York) reports four cases of Graves disease treated with desiccated parathyroids on the principle suggested by Gley of Paris, Munk of Berlin, and confirmed by MacCallum of Baltimore, that it is the absence of the parathyroid glands in the neck which produce the symptoms of Graves disease. In two mild cases, the remedy seemed to produce a good effect. Walsh concedes suggestion plays a large role in the re-

lief of the symptoms in milder cases of Graves disease. In two severer cases, the remedy failed utterly to give relief and in one case seemed to cause an exacerbation of the symptoms somewhat as if thyroid extract were being given. It is not absolutely certain that the parathyroid material was absolutely free from all admixture with thyroid substance, though it was very carefully prepared for these cases.—(*American Medicine*, May 20, 1905.)

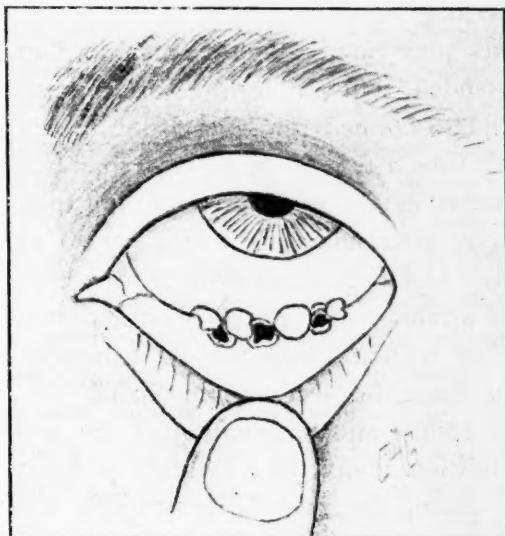
PARINAUD'S CONJUNCTIVITIS.

O. A. GRIFFIN,
Ann Arbor.

Since 1889, when Parinaud, of Paris, reported to the ophthalmological world the occurrence of a new affection of the conjunctiva, this form of conjunctivitis has been regarded as exceedingly rare, but of late, however, probably on account of a more wide-spread knowledge of the condition, many instances are being recognized as shown by a recent report of Verhoeff and Derby who have collected twenty-two cases from the literature. Undoubtedly, many other cases have been encountered, but have passed unrecognized because of their anomalous nature and occurrence. Inasmuch as instances of this disorder, so far as I am aware, have not been observed in this locality, the following case which is characteristic in its symptomatology may prove of general interest.

On November 1st, 1902, Miss B. C., aged 14 years, daughter of a druggist, was brought to me for consultation regarding the condition of her left eye which, save for a fulness of the lower lid, apparently presented a normal appearance externally. Her father stated that, about two weeks previous, the left eye alone became suddenly inflamed, attended with pain, photophobia, a marked swelling of the lids, and a profuse watery discharge which became purulent in the course of a couple of days. This condition obtained only a few days, under the simple course of treatment which he employed, when the inflammation and discharge rapidly diminished. During the following week, however, the eye appeared slightly irritable, especially within the lower lid, attended with a feeling of fulness in that region which was so annoying as to lead to a consultation.

Upon eversion of the lower lid, the following condition, as illustrated in the accompanying cut, was presented. Situated upon the retro-tarsal fold was a mass of polypoid granulations in the midst of



which were observed a few areas of superficial ulceration. An erosion was also present upon the top of one of the larger granulations. The two larger granulations which obtained upon either side of a large central ulcerated area were somewhat pedunculated, and presented an anaemic translucent appearance, while the smaller granulations were reddish-grey in color and irregular in outline. A small amount of thick glairy secretion rested about the peduncle of the larger granulations. Aside from these alterations and a slight injection of the ocular portion in the region of the lower fold, the conjunctiva presented an otherwise normal appearance.

Treatment of the condition was instituted, which consisted in cocaineization of

the granulations and a removal of the larger ones by means of scissors, after which daily applications of a solution of Argent. Nitrat., grs. xx ad oz., were made to the remaining granulations. In the course of a week, however, it was observed that the pre-auricular lymph-glands upon the corresponding side of the face were enlarging and becoming painful to the touch and motions of the jaw. As the swelling of these glands increased which was quite rapid, a slight fever developed, attended with a feeling of depression which obtained for several days. About this time a few of the cervical glands also showed evidences of infection; but fortunately, after enlarging for a period of a week and assuming alarming proportions, the swelling of the glands gradually subsided without suppuration, although at one stage this seemed improbable. As to the course and termination of the ocular condition, under the previously mentioned treatment, the granulations rapidly disappeared within the course of a couple of weeks, leaving naught to indicate their former position and existence.

As to the etiology of this affection, it may be said that nothing definite has thus far been ascertained, although the cases reported by Parinaud would tend to support his theory that it is due to an animal parasite, but on the contrary, the majority of observers, including myself, are unable to associate the disorder with an animal origin.

SUMMARY.

Parinaud's conjunctivitis is an acute infectious disorder of the conjunctiva characterized by a sudden onset, marked swelling and thickening of the lids, profuse discharge which rapidly ceases, formation in course of a couple of weeks of large fungiform or polypoid granulations in the region of the retro-tarsal folds, areas of ulceration between and upon the granulations, one eye only being affected, sudden and marked inflammation of lymph-glands upon corresponding side of head which usually subside without suppuration, and a tendency to spontaneous resolution of both the ocular and glandular disorders, within the course of a few weeks, without injury to the cornea or other ocular structures.

ACUTE SUPPURATIVE OTITIS MEDIA AND ACUTE MASTOIDITIS.*

CALVIN R. ELWOOD,
Menominee.

Many of the laity consider a running ear a matter of little importance because their relatives or friends have endured similar discharges for weeks, months, and even years with little discomfort, and this indifference of the public is unfortunately shown by some of the profession. The serious results of neglect, which come to

the notice of the otologist is my excuse for presenting to you this much discussed subject.

The middle ear and mastoid cells, being the terminus of a closed cavity whose only external opening is the Eustachian orifice, has little protection against infection, and frequently falls the victim of the festive streptococcus and pneumococcus conveyed

*Read before the Upper Peninsula Medical Society.

thither from the nasopharynx. The presence of adenoids in the nasopharynx is often a predisposing cause of middle ear infection through interference with the ventilation and drainage of that organ and should be looked for and if present removed in every child complaining of ear-ache. Neglect to do this beneficial operation will often result in recurrent attacks of earache with subsequently impaired function. As demonstrating the value of adenotomy in these cases I would mention a child brought to my office recently, whose parents had been told he could not remain in school as he was too deaf. The nasopharynx was a mass of adenoid vegetations, the removal of which resulted in normal function. Less striking instances of improved hearing after adenotomy are of frequent occurrence—indeed improved function is expected. Scarletina and epidemic influenza are the most important exciting causes, (and probably the most frequent next to exposure to cold or infection transmitted through the Eustachian canal), but it is also a common complication of the other exanthemata and pneumonia. In the majority of cases, suppurative otitis in children is the result of bacterial infection conveyed from the nasopharynx, and for this reason every practitioner should observe carefully the conditions of the upper air passages.

The symptomatology of this disease is familiar to us all—the pathology is a suppuration of a membrane, lining the practically closed cavity of the middle ear and opening through the attic into various ramifications of the mastoid cells. After careful study and dissection of several mastoids the wonder to the writer is—not that mastoiditis does occur—but that it does not occur in many more serious middle ear suppurations; this communica-

tion between middle ear and mastoid is so free that by pouring moulten lead into the middle ear one can obtain a cast of the entire mastoid process.

The old surgical axiom, "Whenever there is pus leave it out," is to-day quite as pregnant with truth as it was when first promulgated by the elder Gross. When the middle ear as well as other cavities is filled with pus, it must be thoroughly evacuated. If after careful inspection of the drum membrane one is convinced that pus is behind it (that he is dealing with suppurative and not simply a catarrhal inflammation) the auditory canal should be thoroughly sterilized and the pus evacuated through a free incision of the tympanic membrane. The bent handled paracentesis knife is a much neglected and in careful hands most useful surgical instrument. By keeping well to the posterior margin of the membrane, with a sharp knife and using little force as possible so as not to disarticulate the incus should you perchance touch it, the surgeon furnishes a far better exit for pent up pus than Nature would through subsequent perforation, saves the patient hours of agony, prevents damage to the tissues from retention and in some cases aborts a threatened mastoiditis. The incision should extend from the posterior inferior to the posterior superior quadrant and in the membrana flacida be sufficiently deep to incise the connective tissue folds. It is my custom to extend the incision through Shrapnell's membrane and along the superior posterior meatus for a short distance. With careful consideration of the anatomy of the parts and good illumination the operation is absolutely without danger and should be done in every case of acute suppurative otitis media if seen before spontaneous perforation has taken

place. By paracentesis you have: (a) the opening most advantageously located for drainage; (b) the membrana tympani has a clean incision instead of a rupture which will repair with much less danger of impaired function; (c) the drainage is not only sufficient but properly located, whereas it is often necessary to enlarge spontaneous ruptures before sufficient drainage is obtained, and (d) most important of all, the delicate tissues of the tympanic cavity are saved the damage which must come from prolonged contact with pus under pressure. An experience of eight years in special practice has taught me to consider the paracentesis knife one of the most valuable instruments. How much more so would it be, properly used, to the general practitioner who sees these cases in their earlier stages!

I firmly believe that most cases of chronic suppurative otitis media are the result of either neglect, improper or inefficient treatment during the acute stage, many of which could have been avoided by a proper paracentesis made at the proper time. I prefer to do this simple operation under nitrous oxid or ethyl chlorid anesthesia as the incision of the inflamed membrane is intensely painful and can be so much better done with a quiet patient. A striking example of its value was a recent case at the hospital of a man who presented two conclusive symptoms of mastoid infection, in whom fever had existed for a week with no discharge. A very free incision of the membrane and also of the posterior superior wall of the canal resulted in the evacuation of a large amount of pus and convalescence, although for two or three days an operation seemed unavoidable. In this case the free incision of the posterior su-

perior canal wall constituted an internal Wilde's incision (to my mind much more valuable than the formerly much praised external incision) and some pus was discharged from the adjacent mastoid cells.

After incision of the membrana tympani it is my custom to draw out of the cavity all the accumulated secretion possible with a pneumatic speculum, syringe gently with warm boric acid solution, dry thoroughly with cotton tipped applicators and promote drainage by inserting a narrow wick of gauze well against the tympanic membrane. There is no danger about the incision healing, the danger is that it will heal too soon. There are very few if any cases of acute suppurative otitis in which this procedure is contraindicated.

While urging tympanic incision in all cases of acute suppurative otitis the writer is reluctant to endorse its use, as do many, in all cases of acute inflammation of the middle ear. There may be cases of acute earache, associated with rise of temperature, in which the inflammation is simply catarrhal but which become purulent after paracentesis, even when extra tympanic infection can be excluded. The predisposing cause being according to Andrews, the sudden removal of excessive intra-tympanic pressure. A positive differential diagnosis is often difficult depending upon the duration, severity of the attack, appearance on otoscopic examination, and in doubtful cases the result of twenty-four hours' treatment as acute catarrhal. When in doubt do a paracentesis. If the inflammation be purely catarrhal the insertion well into the external canal, of a cotton pledge the fluffy tip of which is saturated with carbolic acid in glycerin, will give great relief. Indeed, together with attention of the nose and pharynx usually cures the disease. Glycerin acts

as a depletant to the inflamed mucous membrane and by filtration osmosis probably carries the phenol into the tympanic cavity.

The treatment of suppurative cases after paracentesis consists in changing the wick daily or twice daily, depending upon the amount of discharge, and thoroughly cleansing the parts with cotton tipped applicators. Frequent irrigation and the use of hydrogen peroxid and middle ear inflation in acute cases are not without danger. The former creates a sodden condition of the tissues most favorable for multiplication of germs, while the latter is liable to favor extension of the infection into the mastoid.

Notwithstanding the most careful treatment of acute middle ear suppuration, extension to the mastoid cells will sometimes occur, such extension being influenced by the character and virulence of the infection, the atomic arrangement of the parts, and the patient's resisting power.

The symptoms of mastoid involvement are frequently out of all proportion to the damage done and too long delay of surgical interference is dangerous. Sudden cessation of discharge during the progress of an acute suppurative otitis is often an indication of extension of the infectious process, as is pain in the mastoid. This pain is usually more severe at night, disturbing sleep, and in children restlessness may be an important suggestive symptom. Pain on deep pressure over the antrum is a symptom of vital importance. In determining mastoid tenderness care must be taken that the pain experienced in the manipulation is really mastoid tenderness and not dependent upon an inflammation of the external canal. No error need occur if, when the examination is made the examining finger is pressed backward and

inward, as by this method the external canal is not disturbed. The tender point is usually over the antrum which is located by the triangle formed by the intersection of the tangents respectively of the posterior and superior bony canal. There is always some mastoid tenderness in certain individuals so the healthy mastoid should be compared. A sagging of the posterior superior wall of the canal, close to the drum membrane, is a symptom of even more importance than pain on deep pressure. Examination of specimens will show that the mastoid cells are usually abundant in this locality and account for this condition. Dench, notwithstanding his extensive experience, states that he has never met with an instance in which when this symptom was present operation upon the mastoid did not reveal the presence of pus. Gleason attaches great importance to continued tenderness to pressure on the tip of the mastoid cells in cases associated with extensive necrosis in this portion of the process. In these cases tenderness on pressure over the antrum and sagging of the posterior superior wall may be very slight as the infectious process is in the lower portion of the mastoid. Andrews suggests the value of auscultation of this region. With a special bell $\frac{5}{8}$ of an inch in diameter placed over the mastoid tip—the vibrations of a tuning fork, placed over the antrum, are heard more distinctly and longer if the mastoid cells are filled with pus or granulations, or when its density is increased from bone proliferation. Extensive tumefaction over the mastoid suggests perforation of the abscess and incision of the mass usually results in copious evacuation of pus. It is a common error that such external rupture terminates the danger of intracranial involvement and these cases

should be subjected to the usual operation, as by it all infected material is removed, convalescence hastened and danger of impairment of function greatly diminished. Fever is an unreliable symptom, seldom high in adults, and frequently no reliable index of the destructive process taking place in such close proximity to the cranial cavity.

When mastoid symptoms develop the prevalent use of the hot water bag is unfortunate as it may promote suppuration in a locality from which the pus cannot escape without rupture into the adjoining tissues or cranial cavity. When these symptoms do arise we must be convinced that there is free drainage for the middle ear, brisk saline elimination should be practiced, patient placed in bed and ice bag kept constantly over the mastoid for from 24 to 48 hours. The ice bag is a valuable diagnostic as well as therapeutic agent, as it will aggravate neuralgic pain while it relieves pain the result of an inflammatory process. For this reason it is liable to abuse by keeping the patient fairly comfortable while a serious necrotic process is unchecked. The employment of leeches or counterirritants at this time is unwise as they tend to obscure subsequent symptoms.

The question when to operate is often difficult and clinical experience has taught that delays are dangerous. The symptoms are often no correct indication of the damage done. In a Chicago clinic I recently saw a case operated in which the parts were so broken down that only the curette was needed and then a large area of the lateral sinus and middle cranial fossa were exposed. Before operating the surgeon stated he would not feel justified to interfere as the symptoms had been very mild, were it not a sequel of la-

grippe which had been responsible for many severe cases of mastoiditis in his practice. Some time ago I was called to the death bed of a patient the victim of intra-cranial rupture of a mastoid abscess, who had recently returned from a pleasure trip. She had mild symptoms for weeks following an acute suppurative otitis but had continued her usual occupation until the day before her death.

I recently saw in consultation a child 11 years old who gave the following history: Four weeks previous she had measles with an acute suppurative otitis which responded to home treatment to such an extent that patient returned to school. Four days previous to my first visit she felt badly but it was not thought necessary to call a physician. Three days later the family physician found patient with temperature 101° , vertigo, fluctuating tumefaction over the mastoid with edema of the posterior superior wall of the meatus. In consultation I most heartily endorsed his diagnosis and advice for immediate operation, which was performed the following day. Incision revealed the mastoid a broken down and pus infiltrated mass, curetttement of which exposed the lateral sinus. After operation 99.1° was the highest temperature and this only on the following day. Next day patient felt fine, her only complaint being that she was not allowed to get up. The dressings were not changed for five days when practically no pus was present. The fact that the meninges were found exposed to a necrotic purulent mass justifies the statement that non-surgical treatment would have resulted fatally. A few days ago I tested her hearing on the side operated and found no impairment compared with the opposite side—watch 18 inches and whisper at 15 feet.

A subsequent case caused me much anxiety by persistent subnormal temperature after operation. The patient, a strumous school girl, was referred to the writer one week after an attack of suppurative otitis complicating tonsillitis. The membranous tympani had ruptured spontaneously during the first 24 hours, and there was now free discharge, temperature varied around 100°—patient complained of a dull headache and function on the affected side was nil. Free paracentesis was made and non-operative treatment conducted for one week at the end of which time there was no improvement. Headache was severe, temperature 99.2° to 101°, very slight bulging of Shrapnell's membrane and posterior superior canal wall—with little tenderness on deep pressure—but the ice bag *increased* the discomfort. The Schwartz operation was performed and liberated considerable pus from the mastoid tip. Although great care was taken to remove all infected bone I did not expose the meninges. Relief from symptoms was immediate, temperature rose above 100° only once the following day and the second day after operation was taken frequently remaining most of the time about 97°, and the third day one-half a degree higher. This sub-normal temperature worried me greatly and I searched otologic literature for an explanation. It was not due to any intracranial complication as patient made an uneventful recovery—left the hospital ten days after the operation and now hears the watch at two feet and whisper at fifteen.

The principal qualification for the surgeon is knowledge of the anatomy which enables him to avoid the facial and if the bone is not necrotic the lateral sinus and middle cranial fossa. If it is necrotic

knowledge of their location enables him to avoid perforation of the dura.

This disease is always a menace to life, the operation seldom although a radical procedure not to be entered upon unnecessarily, but when properly performed before intracranial complications have arisen, will greatly improve the chances of recovery in many patients suffering from this most dangerous of the complications of acute suppurative otitis media.

CONCLUSIONS.

1. Adenoid vegetations, especially in children are frequently exciting and always predisposing causes of acute suppurative otitis media and should be removed.

2. When pus does form in the tympanic cavity it should be evacuated, the sooner the better; a properly performed paracentesis being preferable in every way to spontaneous rupture.

3. Too vigorous after-treatment is to be discouraged.

4. Most cases of chronic suppurative otitis media are the result of neglect or improper treatment during the acute stage.

5. When the mastoid symptoms do develop energetic treatment indicated, operation far less dangerous than disease if not promptly checked by less radical measures.

Sanitation of the Summer Camp.—H. B. Bashore points out the necessity for adequate sanitary arrangements in summer camps. All combustible rubbish should be burned and putrescible waste should be put into a regular garbage hole and covered every evening, at least, with earth. The best way to dispose of human excrement is by means of the dry closet, and two simple forms of this are described and figured. The selection of a suitable water supply is also discussed.—*Medical Record*, May 20, 1905.)

Therapeutic Notes.

FOR HIGH BLOOD PRESSURE—

Potassium bicarbonate.....grs. xxviii
 Potassium nitrate.....grs. xviii
 Sodium nitritegrs. ivss

Sig.—Taken in a glass of water in the morning. (BRUNTON.)

FOR HIGH BLOOD PRESSURE—

Sodium sulphategrms. 14.
 Sodium chloridegrms. 4.9
 Sodium phosphategrms. 15.
 Sodium carbonategrms. 21.
 Potassium sulphategrms. 40.
 Aq. dist. ad.....grms. 100

Sig.—One C.C. (hypodermically) every four to seven days. (Med. Press, Nov. 26, 1903.)

Two NEW HYPNOTICS.—The two hypnotics that have attracted the most attention in the last twelve months are Hedonal and Veronal. Hedonal (methyl-prophylcarbinolurethane) is a white crystalline powder, of a menthol-like taste, almost insoluble in water, but soluble in ether and alcohol. J. Fraczkiewicz (*Therap. Monatshefte*, 1903, No. 11) concludes that it is useful in insomnia of hysteria, neurasthenia, senility and psychoses of milder grades, but that in insomnia from pain it is without effect. It produces within from $\frac{1}{4}$ to 1 hour, a moderately deep, dreamless sleep, lasting 5 to 8 hours, not followed by unpleasant after-effects. Even when it was used for a considerable period no harm resulted. The dose was 20 to 30 grains.

Veronal belongs to the urea group of hypnotics, being chemically diethylmalonylurea. It is a white, crystalline powder, soluble in about 12 parts of boiling water and in 145 parts of cold water. The dose is from 8 to 15 grains. R. Landenheimer

(*Therap. der Gegenwart*, 1904, No. 1) reports a case illustrating the possibility of habituation. G. Clarke (*Lancet*, Jan. 23, 1904) reports a case of poisoning with veronal (24 grains). A large number of clinicians, however, have testified to the value of veronal as a somnifacient in the last year. (*International Clinics*, Vol. 1, 1905.)

NEURALGIAS TREATED BY SUBCUTANEOUS INJECTIONS OF AIR.—Under Antiseptic precaution and with care not to draw any blood, a needle is inserted into the intramuscular planes of a chosen site and a bicycle pump or a bulb of a Pacquelin cautery being attached, the desired quantity of air is injected. This varies from $\frac{1}{2}$ pint to 1 pint, depending on sensations of the patient. Light massage should follow the procedure. It is well to repeat this daily until the crepitation due to the air has disappeared. Of 25 cases of sciatica treated by this method 13 were cured. This treatment is applicable to various forms of neuralgias which resist other methods. (*The American Journal of the Medical Sciences*, May, 1905.)

A NEW DRUG FOR DIMINISHING SWEATING.—Eumydrin, methylatropine nitrate, prevents excessive sweating especially in pulmonary tuberculosis. Eumydrin is a white powder, moderately soluble in water. It is given in doses of from 0.015 to 0.0375 grains. Most patients bear it well. In addition to checking the perspiration in tubercular conditions, the patient's general condition is improved, the appetite is increased and his bodily vigor is augmented. (*Engländer, Weimer Klinisch-therapeutische Wochenschrift*, 1904, No. 48.)

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Editorial.

SHALL THE STATE LEGALIZE THE PRACTICE OF MEDICINE BY OPTICIANS?

The druggist's legitimate business is to compound and sell drugs and appliances in accord with physicians' prescriptions—but not infrequently he both prescribes and sells—viz., is both physician and druggist. The optician's business is to fill the prescriptions of physicians—for the relief of refractive and muscular defects, but he also often prescribes, as well as sells glasses—viz., is both physician and optician. The druggists have never sought to have their "counter prescribing" legalized; not so the opticians.

In many States efforts have been made by them to secure State recognition of their incursions into the domain of medical practice. Thus far they have failed, except in two States, thanks to the "horse sense" of legislatures as developed by the instruction of physicians.

The matter was brought before the people of Michigan, through a bill introduced into the House March 22, entitled a "Bill to Regulate the Practice of Optometry." It defines this practice thus: "The employment of subjective and objective mechanical means to determine the accommodative and refractive states of the eye and the scope of its functions in general, and the adaptation and ad-

justment of lenses or other appliances for the relief thereof and the aid of vision."

Provision is made for a State Board to examine all new comers into this field, and to punish all who have not passed the examinations it directs. Physicians and surgeons are exempted from this examination as are all persons "who sell spectacles or eye glasses without attempting to traffic upon assumed skill in adapting them to the eye."

The enactment of such a law would damage the entire people. The people are composed of the medical profession and the laity. The present medical law gives to the medical profession exclusive right to care for the sick, deformed, lame, halt, blind, etc., etc.; in return for this exclusive right it requires of each doctor a long, laborious and expensive course of training, and the passing of a strict examination. The practice of optometry is as much a part of medical practice, as the treatment of diphtheria, an operation for appendicitis, cataract or strabismus.

This proposed law is intended to place the expensively trained physician in competition with the cheaply trained optician. Farther, this competition is tainted with commercialism. The opticians are usually clerks in jewelry, grocery, drug, department or general stores. The profits are large on this class of merchandise. Hitherto there has been a limitation in the use of mydriatics. With this proposed new State authority these people can use mydriatics, in fact practice medicine so far as is profitable in the prosecution of their business.

The limitations of professionalism forbid the doctor to advertise, and so meet the competition of the advertising optician. Hence the rights of physicians under the existing medical law would be

materially impaired should this bill become a law.

The people would be damaged because the State stamps as competent to practice medicine in certain fields, those who are not physicians. Misled, they will increasingly trust their eyes to those devoid of the training requisite to deal with the complicated problems presented. The damage thus resulting in the past will be vastly increased should the proposed law prevail. The greed of gain by commercial houses prompts them to engage in the practice of medicine at a fearful sacrifice of the people's eyes. Cases like the following often present themselves to the ophthalmologist's consulting room. A person past middle life, begins to fail in vision. Attracted by the advertisement that R. G. & Co. examine "eyes free" he purchases glasses of the house. In a short time the eyes again fail. Again the house advertising free medical examination of eyes is consulted, and again glasses are purchased. This is repeated till practical blindness presents. The doctor is then appealed to but finds that an insidious glaucoma has done its work, the person is blind beyond relief. In the same manner, diseases in the fundus of the eye, are treated by the optician, with the assurance of ignorance, and the time for successful treatment having passed unimproved, permanent loss of vision results. Then are the cases, in which organic disease of distant organs might be recognized by a competent doctor, and the patient properly treated, recover; instead they pass through the gates of the "optician's ignorance" into a chronic invalidism, or the unknown of the next world.

Another class of cases are associated with complicated derangement of the digestive or nervous systems; they, too,

trusting in the "optician" rather than the "doctor" learn but too late their fatal mistake. In ways such as these the people have been damaged by opticians, and should their past practice be legalized, the damage will be far greater. The interests of the entire people demand the highest skill of the trained doctor in the so-called "fitting of glasses." The proposed bill should be opposed by all who value their neighbor's eyes, as a part of community prosperity; who resent the attempt to steal rights already given the medical profession; who object to encroachments of business houses upon professional work.

This bill to secure State endorsement of a scheme "to traffic upon assumed skill in adapting spectacles and eye glasses" without a physicians' education, is a colossal exhibition of monumental cheek.

On May 11th the above Bill was killed in committee—showing that it possessed the backbone to refuse to stamp with State authority those desiring to practice medicine without passing the scrutiny of the people's "Medical Examining Board.

OLD MEN IN STATE MEDICAL ORGANIZATIONS.

The student of the medical profession notes comparatively few old men in medical societies. They care little for organizations; embittered, oftentimes, because dropped from membership. It is exceptional that they speak a good word for the organization which turned them out and often they infect the young practitioner with bitterness, and so keep him from working with his State organization.

The reasons why they did not pay annual dues, may be manifold: the enfeebled

ment of sickness, or age; the misfortune of a larger expenditure than income, from various causes, till absolute poverty forbids other than necessary outgo.

They may have served the organization five, ten, twenty or even forty years, and done much to maintain the dignity and honor of the profession, the result is the same; lack of payment of dues consigns them at the last to the waste basket provided for such as are longer unable to actively serve.

A moment's reflection will convince the most obtuse that this state of things obstructs the best life of professional organization. Certainly old and honored members therein should never be permitted to escape its fold, because of misfortunes incident to the latter stages of human life. The least that the organization should do is to place such (under suitable regulations) in a list of honorary members with all the rights and privileges but none of the financial obligations of active membership.

To start and maintain such a list of honorary members, calls for tact, good judgment, but each state organization contains much of these qualities. To draw the line between productive ability and non-productive, so that all may recognize the fitness of the same is not an impossible art.

In its new organization the Michigan State Medical Society has attempted to solve this problem in the manner indicated. It may be that experience will point to a better way, but the principle once adopted, we may safely leave the details to the good sense and tact of the Society.

The profession will never be organized till every doctor in every county is a member of the county society, and every county a branch of the State Society—till he

enters this organization as soon as he hangs out his sign and remains there till he has drawn his last breath. To attain such organization past methods of dealing with old men must be revised. We shall be glad to learn of a better method than that adopted by the Michigan State Society.

UNFAIR DISCRIMINATION BY CHEMICAL DEPARTMENT OF MICHIGAN UNI- VERSITY.

Current report says that lately the Flint authorities applied to the Chemical Department of Michigan University for an investigation of a case of poisoning. It was told that the case would be undertaken only on payment of one hundred and fifty dollars, and this strictly in advance.

Yet this department teaches students toxicology, and this case would have furnished practical material just such as the students are likely to meet in actual practice. It would seem that the department would have been glad to take the case for the boys to "practice" upon, just as they take the sick into the University hospitals.

We think the University did right, and only wish it would apply the same rule to the Medical Department, viz.: charge full professional fees of such as are able to pay the same, as it charges board in the hospitals. To the poor give both board and professional service free.

The University did right to turn down the City of Flint, when it applied for free chemical service from experts; but in common fairness it should turn down the "well to do" who apply for medical or surgical treatment. Instead it only re-

ceives the "well to do," viz.: those able to pay board in advance so long as they expect to stay in the hospital. Those unable to make this advance payment must seek relief elsewhere. Yet the University needs these poor people for its clinical teaching and turns them away to give room to those who can pay hotel prices for quarters in the hospital. If it would allow its professors to charge full fees as it does the chemical professors there would seem to be an equity in the matter. We trust the Regents will apply the same sort of rules to all departments, under similar conditions—treat all alike.

WHAT IS THE AMERICAN MEDICAL ASSOCIATION DOING FOR THE INDIVIDUAL DOCTOR?

It has promoted the evolution of the State Medical Societies till now thirty-three are in active co-operation.

It has promoted the evolution of the County Societies in each State, so that each individual doctor may have a part in the activity of his local society; a part in the conduct of his State Society; a part in the activities of the American Medical Association; and a voice in the direction of national professional interest. There should be no kicking against the acts of the National Society, as every doctor has a voice in shaping them as he desires.

Because the individual doctor so desired, he possesses a National Journal devoted to his interests, his support of it will make it still better—though now it is the best general medical journal in the world—made so by the combined labors of the best physicians in the country.

The Association made possible the development of the State Medical Journal, which has a function to serve the individual doctor all its own. It is for the doctor to help his own State journal by promptly paying his dues, writing his best thought and work, and stimulating others to do the same.

The Association has established a Council on Pharmacy and Chemistry, with large powers. Its object is to help the individual doctor know more definitely the nature and exact composition of the drugs he uses, not within the U. S. Pharmacopœia. It aims to throw light on the dark spots of his pathway; that he may know just where he is stepping, and the tools he is using. Rightly conducted, this Council will prove to the individual doctor of the greatest service.

From time to time it has had reports and investigations on medical education—this same work is to be enlarged and rendered more thoroughly by a Council on Medical Education. Possibly future members of the profession will join our ranks better fitted for their work—made so by the exhaustive study and persuasive efforts of this Council—if so, the individual doctor will reap the benefits thereof.

It is now preparing a directory of the physicians of the United States, owned, and managed, for the benefit of each individual physician—it is hoped that members of the County Societies will tell this to non-members that they may join the County Societies, and gain the benefit of being enrolled in this list. It is pretty sure that Insurance Companies and others seeking competent physicians, will adopt this publication. Those in it stand a chance of getting a job with good pay

therefor. Already the lists of State Society members are largely depended upon for accurate information respecting the individual doctor.

The individual doctor has been benefited by the efforts made for more uniform licensing and the reciprocity between the states. Farther progress is being made by the National body in the hope of finally securing the much to be desired reciprocity, in the interests of the doctor who desires or is compelled to move from one State to another.

Perhaps the best service of the American Medical Association is its vigorous promotion of interest in questions of National scope; a pride of being one of seventeen thousand doctors; an enthusiast in the work of enlisting the co-operation of the hundred thousand other doctors in the task of rendering themselves worthy of their own self-respect, and that of the laity.

THE PETOSKEY MEETING.

The attention of the members is called to the Fortieth Annual Meeting of the State Medical Society to be held the last three days of this month, June 28th, 29th and 30th, at Petoskey, the program of which appears in this issue on page 287. All preparations are complete for the entertainment of the visitors and it is hoped and expected that every physician will deem it his duty, privilege and pleasure to attend the Annual Gathering. Every one who has the welfare of his profession at heart should not fail to devote these few days at her shrine, for no greater impetus for the hard work of the coming year can

be given than the approval of the individual member expressed by his presence.

Mr. Pack, the Manager of the New Arlington Hotel (Headquarters), will send a special invitation to each member. That he may be able to judge of the number who will attend a postal card will be enclosed, which it is requested each member will sign and post at once.

On to Petoskey, June 28th, 29th and 30th.

SCIENTIFIC EXHIBIT

The "Scientific Exhibit" will be a unique feature of the Annual Meeting at Petoskey. As has already been stated in the JOURNAL the exhibit is confined to diseases of the "Gastro-Intestinal Tract." Besides the display in the Exhibit room, where will be presented a collection of casts and illustrations of stomach-analysis, pathological specimens, crude and finished drugs used in the treatment of diseased condition of the alimentary tract, together with the surgical appliances. The Committee will give on Wednesday evening, June 28th, a lantern slide demonstration. Drs. Warthin and Cowie will give a demonstration on "Tissue-bits in the Stomach-washing, and Their Aid to Diagnosis," and Dr. Hickey will present some X-ray slides.

Any member who has a contribution in the way of specimen, chart, surgical instrument, drug, etc., to offer, will please communicate at once with *Dr. A. S. Warthin*, Pathological Laboratory, University of Michigan, Ann Arbor, or take the same with him to the Petoskey meeting, June 28th, 29th and 30th.

County Society News.

BAY COUNTY.

The Bay County Medical Society held its regular meeting in Bay City, May 10, 1905. Harvey Gilbert read a paper on "Prevention of Communicable Diseases."

Abstract:

About the year 1867, a German physician ventured the opinion that diphtheria was a disease of local character, due to the presence upon the mucous membrane of the throat and nasal passages of a vegetable parasite or fungus, acting upon the exudations from the blood into the cellular tissues, as a ferment. At that time little or nothing was known of these microscopic bodies, although there was, to be sure, a germ theory as to the cause of disease.

To-day there is a science of bacteriology, and twenty-eight different and separate diseases are traced back in their origin, to some form of microscopic life, either vegetable or animal. Seventy-five per cent. of all deaths are rated as caused by one or another of these twenty-eight diseases. We might safely and scientifically add to the above list, all such diseases as result some time in their course in actual lesion. All these diseases being due to influences originating, as far as the person so attacked is concerned, outside of the body, are classed as communicable, and being communicable, preventable.

About the year 1880, the Klebs-Loeffer bacillus was accurately described, and very soon thereafter other bacteria, until at the present time a large number of characteristic diseases are readily traced to a characteristic cause.

A cause for each disease has been determined and the treatment, while admittedly imperfect, is reaching down to a sound basis of truth, but as applied to prevention, all knowledge is in a chaos of doubt and uncertainty. Prevention is the leading chord, the key-note; and it should be and must be the aim of our profession not to restore health when lost but to maintain health while still unimpaired.

A discussion of the phenomena of disease, as produced through the agency of any of these parasites should be of interest, had we the time. Whether the germ is the result of the lesion or the lesion the result of the germ merits but a passing notice; but whether the characteristic bacteria will in all subjects and at all times produce the characteristic symptoms of a disease is a question of moment; and were we able to answer this question positively, the solution of the more

important question of prevention would at once be apparent. The toxemia, the autointoxication, if we may use the term, appears to be the cause of death, although it is not improbable that death might be produced from some mechanical interference with the normal functions.

Again, through the course of many of these diseases, a new phase may be developed, not constant, but sometimes, i. e., pyaemia. Have we then two distinct diseases and two distinct causes? This point raised may seem at first far fetched, but it is worthy of more attention than it has received. One feature has been mentioned by some, and observed by all; it is the change, chemically speaking, in the product of the lesion. May we not be deeply concerned as to the importance of such change?

The identity of the Klebs-Loeffer bacillus, a toxemia as a result therefrom, and the satisfactory results following the early exhibition of the anti-diphtheritic serum, are accepted by all; and under the enforcement of the public health laws, the isolation of the patient and the disinfection before release seemed possible of satisfying our most sanguine desires and expectations; sometimes, however, when we feel most secure the danger is greatest.

For several years the association of boards of health in the state of Massachusetts have through systematic work been endeavoring to learn how well isolation isolates; in other words, what portion of the community outside of the quarantined houses, though apparently well, were infected and capable of communicating the disease. I quote the committee's remarks upon their tabulated report, which says: "Our observations show that an average of three per cent. of all the people examined had typical diphtheria bacilli in their throats." Again, upon the question of isolation they report, "It is very difficult to persuade a man that he should remain at home because he has diphtheria bacilli in his throat, when one is obliged in answer to his inquiry, to admit that there are hundreds of others going freely about the street, although infected like himself."

The high death rate from tuberculosis and pneumonia has brought these two diseases into great prominence as a proper subject for investigation by bacteriologists, and is one of serious moment to public health officials. It is said that one-half of the human race is affected in a mild or severe form, by consumption; that it causes one-seventh of all the deaths, and one-third of the deaths of those who perish between the ages of fifteen and forty-five. On the other hand, Dr. Arthur Reynolds, Commissioner of Health for Chicago, in a valuable paper upon pneumonia,

read before the conference of health officials at Ann Arbor, 1903, gave statistics as follows: "Since the census year 1900, in the City of Chicago, one-eighth of all deaths were claimed for *pneumonia*, one-third more than for consumption, and forty-four per cent. more than for all other contagious or infectious diseases combined; or 6,560 deaths from pneumonia against 4,889 from all others except tuberculosis." Recent statistics are even more startling: At the close of the year 1904 there were in the city of New York alone 28,000 cases of pneumonia, and a mortality in one week of 309.

With the commencing of the new year, a serious outbreak of cerebro-spinal meningitis occurred in New York, resulting in many deaths, principally among the children, and spreading into all parts of the country. The rapidity with which it spread into distant parts, might suffice to throw some doubt upon the theory of communicability; a question by no means settled and opening a new field for investigation. The rapid spread of meningitis naturally calls to our mind the periodical appearance of la grippe in epidemic form; another disease in which it is claimed that characteristic forms of bacteria have been found; consequently a preventable disease.

In the eruptive fevers: scarlet fever, measles, smallpox and several others, we come to a distinct class; those possessing many features entirely different from any thus far described. These diseases are unquestionably communicable, and yet no specific germ or bacteria has been described. Perfect isolation undoubtedly restricts them and perfect disinfection will destroy the virus, while we remain in doubt as to its identity.

In the casual mention of the several forms of communicable diseases it has not been the aim to enter into a technical description, an undertaking interesting in a medical college, but out of place before a society of professional men, but if possible to hold these varied forms of disease vividly out, that we may fully realize the important figure they cut in the lives and happiness of our fellow beings; that we may fully realize the responsibility resting upon us, the conservators of public health, and realizing these things, enter fully into the truth of one of the old axioms of our time-honored profession, viz.: "When we have to do with an art whose aim is the saving of human life, any neglect on our part to make ourselves thoroughly familiar with that art becomes a crime."

Realizing these things to the fullest extent, we have a subject before us far outweighing any other of which our minds may conceive.

The epidemic of smallpox which has existed for a period of over five years, and of which we are constantly reminded by the ever-present yellow placards, has afforded an excellent opportunity to those directly connected with it to study its various forms and phases, and with practical experience compare the history and treatment of past outbreaks with the present.

That smallpox, while exceedingly contagious or communicable, is not a dangerous disease if properly handled, and proper handling is little more than the observance of good, common sense, sanitary measures,—cleanliness, is a statement at which one cannot but be surprised. Still one cannot also but be surprised, upon reading the text-books, at the treatment prescribed; but not surprised at the serious results following such treatment.

Some one remarks: "Smallpox is not what it used to be, it is altogether a different disease." During the last winter a request came from another county for a nurse. One of the young women who had been employed in that capacity here, responded, and returned again after about three months' service with an account of her experience. She said that altogether eleven patients had been cared for at the detention hospital and that eight had succumbed to the disease. In answer to a question as to the treatment followed she said that their bodies were swathed with oiled bandages, they had all the whiskey they could drink through the day, and morphine enough at night to keep the whiskey quiet.

It is not difficult of demonstration that all of these diseases are reproduced by inoculation; that the virus—the bacteria—or the infection must be brought in contact with the living tissues; that they must be deposited within the body. An unbroken cutaneous surface or a perfectly whole mucous membrane is a perfect barrier against them; this condition is perhaps rarely found. If this is taken for granted there would appear to be two modes of preventing infection; one, perfect and complete isolation; the other, rendering all infected matter sterile. Perhaps neither is practical.

The State Board of Health lays down for the guidance of local health officers, rigid rules for disinfecting after communicable diseases. These rules are based upon the theory that disease producing bacteria must be destroyed; a proposition which every health officer knows to be intangible. If a large number of well people, as demonstrated by the Massachusetts society, and as we know from other proofs, are possessed of disease germs, how successful shall we be in an effort to destroy them?

It would seem that nature has placed these microscopic plants, as she has placed plants of visible dimensions, with us for a purpose, and the fulfillment of that purpose, animal life is sometimes endangered. But is it not more than possible, is it not probable, that man in his higher plane of mental development will yet be able to restrain and control the morbid influences which they are capable of producing?

If it is true that the manner in which these agencies produce disease is through the power which they possess of returning organic matter back to its elementary constituents, is it not true that a full knowledge of the chemical changes wrought through their agency should arm us with the power to restrain them? We know that all chemical action upon matter of like consistency with that composing the human body is restrained or accelerated according to the physical surroundings, and that such chemical action may be completely changed. The presence of oxidizing agents may suspend all processes of fermentation or putrifaction, and completely change the product of such process. What, then, becomes of the toxin? These changes are going on constantly in the living body, and even more rapidly than without; on alcohol to-day, on aldehyde tomorrow, then breaking up into acids, and are cast off.

In the experience afforded by the care of a large number of smallpox patients it has been possible to observe the action of chemical agents, constantly applied, upon the eruption, and consequently upon the totality of symptoms of that disease. It may tax your credibility to hear the statement that the eruption of smallpox may be arrested in the erythematous stage; that neither vesicles nor pustules will develop under the constant application of bi-chloride of mercury—1 to 500—but such is the case. The softening down of the pustule will not occur with a solution much weaker, and the fever of superation as a consequence.

The exhibition of intestinal antiseptics in diseases of the stomach and bowels need no urging from me.

That an intelligent use of these agents must inevitably follow a complete understanding of the phenomena of disease seems assured, and that the bacteriological laboratory alone will not furnish that intelligence, but that there appears a large field for work in the chemical laboratory to determine chemically the organic changes taking place in the presence of that which we term disease, and determining definitely the changes to be looked for under the use of antiseptic agents.

A. W. HERRICK, Sec'y.

LAPEER COUNTY.

Lapeer County Medical Society held their regular meeting April 12, 1905.

Adam Price, of Almont, read a paper on "Pernicious Vomiting of Pregnancy."

Abstract:

Cases of this class are fortunately rare. The writer has had four such cases. Case I. Vomiting was so bad that absolutely nothing could be retained in the stomach. Pulse ran 150 to the minute and the temperature reached 103 degrees. Bismuth, oxalate of cerium, morphine by mouth and hypodermically, chloral by rectum, were all tried to no purpose. The writer then proposed cauterizing the uterine neck and if that failed abortion, which was refused, and the patient died. Case II. Was given $\frac{1}{2}$ grain of morphine with 1/30 grain of strychnine hypodermically four or five times a day, sufficient to control the vomiting. Milk and whiskey were given by rectum. The patient went to full term. A few years later she again became pregnant in a distant city and died as a result of the constant vomiting. Case III. Showed no improvement after all these measures failed. Dilatation of the neck of uterus gave temporary relief. After three such dilatations, the patient aborted. Case IV. Was given much the same line of treatment as was given in the preceding three cases with no improvement. The writer passed one finger in the cervix, then applied carbolic acid introduced well through the internal os, thoroughly cauterizing inside of uterus near neck. Patient improved at once. Dr. Price recommends to begin with the simple measures first and then to proceed to the more severe ones if unsuccessful. Do not resort to cauterization until less dangerous ones have failed. Abortion is the last resort.

John S. Caulkins, of Thorneville, read a paper on "Man's Usefulness."

Abstract:

Is it desirable to live to a good old age or is it not? The question must be looked at from two points of view, from that of the individual and from that of the community. Personally if he is quite hale and well, has money sufficient to supply his wants, has the respect of those who know him best, takes a lively interest in new things, life may be fairly enjoyable to him when he reaches the age where he should have been chloroformed. (Saint Osler.) On the other hand, if he is sick, decrepit, poor, listless, nearing second childhood and conscious of it, life may become a burden to him and he would welcome chloroform as his best friend. Looking at the question from a so-

ciological point of view, the answer is, Has the individual any utility left in him. If he can do something better than a younger man, why not then tolerate him a little longer, but if the capacity for work is over and second childhood comes on, the community will look upon him as an encumbrance. But there is a larger point of view, and that is from the view of the human race. It is desirable that man should live for the benefit of the race. Youth is rash, inconsiderate, passionate and boisterous, while age gives sober self-control, justice and fairness. If we can add a score of years to the average length of life, to the period of human activity, its potential is at least doubled.

H. E. RANDALL, Sec'y.

MASON COUNTY.

The Mason County Medical Society invited the members of the Manistee and Oceana County Medical Societies to unite with them in a meeting at Ludington, April 25, 1905. S. C. Graves, of Grand Rapids, read a paper on "The Early Diagnosis and the Late Complications of Cholelithic and Other Inflammations of the Bile Tract.

Abstract:

I desire to emphasize two features of importance as suggested in my theme. These are: First, that cholelithiasis is a more common ailment than has heretofore been believed, and, second, that early surgical interference of the right sort is the key to the solution of the problem. The writer then takes up the anatomy of this region in detail.

Three conditions must be obtained before gall stones can be formed. These are: First, a disquamation subinflammation. Second, micro-organisms or weak culture, principally the bacillus coli communis, typhoid bacillus and various staphylo and streptococci. Third, stasis.

Jaundice is caused solely by obstruction to the common hepatic duct. This obstruction may be lithic, neoplastic, or inflammatory.

Gall stones can remain quiescent for years, producing absolutely no symptoms in nine out of ten people carrying them. The chief early symptom is "indigestion," variously referred to as "colic," "gastralgia," "spasm," etc. A typical picture of active bile tract disease exhibits, chill, thermal rise, sweating, pain and vomiting. The pain is both local and referred. Naunyn's sign seems quite reliable.

The damage of the bile ducts by the establishment of a temporary, external fistula (cholecystostomy) and the removal of calculi wherever

found, followed by suture or not and by tubulogauze drainage, indicate the principles which underlie successful treatment.

J. A. King, of Manistee, read a paper on "The Bugaboo of Hemorrhage in Ectopic Pregnancy."

Abstract:

Ruptured vital pregnancy calls up in me a mental picture of a patient in a state of profound collapse, pallid, pupils dilated, anxious countenance and fluttering almost imperceptible pulse. These signs of impending death from hemorrhage became years ago so associated in my mind with extra-uterine pregnancy and a ruptured fallopian tube, that I have never gotten rid of the nightmare. I can now recall but one case where the signs actually witnessed represented the appalling picture that impressed me so in my student days. The writer feels that ectopic pregnancy is a common mishap, that evidences of severe hemorrhage, (a cold, clammy skin, steady or imperceptible pulse) and a general condition of collapse is oftener absent than present. The writer then reports three cases.

W. C. MARTIN, Sec'y.

MECOSTA COUNTY.

The Mecosta County Medical Society held its regular meeting April 14, 1905. J. O'Hara, of Big Rapids, read a paper on "Antistreptolitic Serum as a Remedial Agent."

Abstract:

He described the method of making the serum and then reports several cases of puerperal fever treated with antistreptolitic serum. The writer's deductions are as follows: First, that every time I have given the serum marked improvement followed; second, that the administration of even large doses frequently repeated were never followed by any toxic effect; third, when used persistently in large doses the serum seems to be decidedly bacteriocidal.

L. S. Griswold, of Big Rapids, read a paper on "Pneumonia."

Abstract:

Pneumonia to-day is an unsolved terror. It is one of the greatest problems that the twentieth century scientist has to solve. "Facts are few, theories are legion." The mortality of pneumonia is greater than that from tuberculosis. As we have no specific for pneumonia, the prevention of this disease should be the chief aim of every physician.

A. A. SPOOR, Sec'y.

MONROE COUNTY.

The Monroe County Medical Society held their regular meeting at Monroe, April 20, 1905. Eugene Smith, of Detroit, read a paper on "Mastoiditis."

Abstract:

I feel it incumbent upon me to call your attention to the fact that all cases of acute mastoid trouble are caused by acute inflammation of the middle ear. There are a few cases of primary mastoiditis on record, but not enough to cause one to modify the general statement.

The great variety of circumstances under which an acute inflammation of the middle ear develops, should keep one alert to its possibilities, as in the following: measles and scarlet fever, diphtheria, grippe or epidemic influenza, and typhoid fever and tuberculosis.

To-day it is a well known fact that micro-organisms play a very important part in the etiology of middle ear and mastoid affections, and while we most frequently have a mixed character in the infection, it is possible to have only one variety.

With regard to the symptoms of middle ear inflammation, earache is an important symptom and should be carefully investigated. It is usually the first symptom to appear, and in children in too many homes is thought to be one of the necessary ills of childhood. The pain may be a mere dull ache or extremely severe. In infants, rolling of the head or putting the hand towards the ear will often indicate the seat of the trouble. Not infrequently after a child has suffered for two or three days, a discharge of pus from the ear reveals the cause of the several days' pain. It has been satisfactorily demonstrated that all acute inflammations of the drum cavity extend more or less to the mastoid process. The extension may be superficial, giving us a mastoid periostitis. In a majority of cases, however, it is only a burrowing of muco-purulent secretion from the attic or neighboring cavities beneath the periosteum over the mastoid. An incision or spontaneous perforation of the swelling is often followed by recovery. This happy termination does not happen so frequently in the cases of mastoid cell complications.

The symptoms of mastoiditis vary to such a degree that many times life is endangered by awaiting a grouping of the well known signs, many of which may be wanting or masked. Let me say in explanation of the term "masked," that important symptoms may be hidden by the use of anodynes and antipyretics, hence they should be given cautiously, if at all. The same thing may

be said about blisters and iodine. The most prominent symptom is pain in the mastoid region which radiates in all directions. Pain is increased on percussion or pressure on the bone, particularly over the antrum or tip. Pain, however, is not a constant symptom, for sometimes pus forms in the mastoid cells with little or no pain. We frequently find increase of surface temperature of the affected side; bulging of the posterior and upper parts of the drum, with bulging or drooping of the adjacent soft parts of the meatus. The temperature varies and may range from 90° to 105° F. Generally it is higher in children than in adults. A comparatively low temperature, however, does not indicate necessarily that the case is not grave, for many severe cases occur in adults wherein the temperature is less than 100° F.

One of the most valuable indications of mastoid inflammation is tenderness on pressure over the mastoid region, especially so at the tip and over the antrum. As the cells in the tip are the ones most commonly involved in the acute variety, we most frequently find tenderness in this region. One must not lose sight of the fact that tenderness over the mastoid is often caused by furuncular inflammation of the meatus. Careful examination and history of the case will determine its character. The significance of tenderness will be more or less obliterated by the application of tincture of iodine or blisters behind the ear, as is too frequently the case. In the acute variety of mastoiditis we are more apt to have oedema of the mastoid region than in the chronic form. Prolapses of the upper and posterior wall of the meatus is looked upon by some as being positive proof of the implication of the mastoid, but it is not a constant symptom and its absence is not significant.

If the drum has been incised or has ulcerated, and a profuse creamy discharge continues for ten days or two weeks, we may be assured that the mastoid cells are affected, for such copious discharge must necessarily come from a much larger space than the tympanic cavity. When associated with fever and pain on pressure, operation should be done. Occasionally the discharge finds an exit from the tip of the mastoid, either through a congenital defect in the bone or pathological softening, into the tissues of the neck, burrowing in the deep fascia and giving rise to large abscesses of the lateral cervical region. The diagnosis of this condition may be somewhat difficult. A hard, rather painful swelling in the retro-maxillary fossa often of perfectly normal color may be the only symptom at the beginning, the mastoid being unchanged and showing slight, if

any, sensitiveness on pressure, though percussion nearly always shows it.

Caries of the temporal bone occurs more frequently during acute purulent inflammation of the middle ear than in chronic suppurative cases. Especially so in scarlet fever, tuberculosis, syphilitic and typhoid conditions.

The most extensive destructions probably exist in the scarlet fever cases.

Caries of the ossicles is common.

Pain is the most prominent symptom of caries, though in tuberculous or scrofulous persons it may be entirely wanting. The cause of the pain may be due to implication of the periosteum or retention of pus in the cells, and it often disappears on escape of the pus.

Paresis and paralysis of the facial nerve developing in the course of suppuration of the middle ear is not infrequent.

Local treatment of carious processes is seldom of much benefit, operative treatment, however, affords in a majority of cases most elegant results.

Owing to the proximity of the brain and its membranes, marked signs may occur of cerebral irritation and the case may be taken for a meningitis, or we may have stupor and muscular spasms, etc. Prognosis usually is good.

As acute mastoiditis is almost invariably incident to an acute inflammation of the middle ear, the treatment should begin with the latter, i. e., presuming the case is seen before the mastoid is seriously involved. The trouble being of a febrile character, it seems almost unnecessary to state that complete rest and a strict regulation of the diet should be enforced. An early incision, not a mere paracentesis, in the drum membrane should be made in order to establish free drainage; a small wick of gauze should be placed in the meatus, the distal end of which is placed in contact with the opening in the drum with a view to facilitate drainage. This wick may be replaced two or three times daily, and the meatus slightly douched or wiped out with a cotton pointed probe and almost any antiseptic lotion. Should marked improvement not begin within two or three days, and pain in the head with tenderness of the mastoid region continue in spite of an apparent free drainage, opening of the mastoid will probably be necessary. The abscesses due to periostitis, which most frequently appear in children behind the upper portion of the auricles, should be incised and careful examination made by means of a probe to find if caries or a sinus exists; if so, the cell should be opened by enlarging the sinus. In making the mastoid operation in children, the age of the child and the

consequent condition of the mastoid structure should be taken into consideration.

The fact that mastoid abscess in the acute form usually affects the large cells in the middle and the tip, our operation is generally directed to the opening of this portion of the mastoid, and differs from the operation called for in the chronic forms of suppuration of the ear, where the antrum, cells and middle ear should be generally thrown into one cavity. It has been very aptly stated that a person with a chronic otorrhœa is in a condition akin to a man with a charge of dynamite in his skull, a sudden jar—a severe cold—is liable to cause an explosion.

Probably a majority of brain abscesses are of otitic origin and the probability of brain troubles should never be lost sight of in chronic suppuration of the ear.

In mastoid abscesses occurring in chronic cases, the absence of oedema, redness and increase of temperature as a rule cuts no figure. Persistent pain or severe headache which develops in or near an ear which has long been discharging will many times influence our decision to operate.

The treatment of all cases of ear disease in their incipiency cannot be too strongly advised.

The operation should be performed as early as possible after the diagnosis has been made. Nothing can be gained by delay.

GEO. F. HEATH, Sec'y.

SHIAWASSEE COUNTY.

The Shiawassee County Medical Society held its regular meeting April 4, 1905. W. A. Harper read a paper on "The Value of Blood Examinations."

Abstract:

It is not my intention in writing this paper to reiterate any of the rules nor to discuss the technique of making blood examinations, but simply to report a few instances where a blood examination has either proven or corrected my diagnosis and also to show why it was necessary in some instances for me to change my opinion.

Case 1—Roy B., age 13; had been complaining for some few days of being tired and of having a continual dull headache. On November 29th his mother noticed that he had some fever; she gave him home treatment during the next couple of days without any improvement. On December 1st I was called, and found a boy of ordinary size who was complaining of moderate headache, a bad feeling in the stomach and a slight diarrhea. The boy was quite resigned and not inclined to

talk more than to answer questions in the very shortest manner possible. Unsolicited he made no complaints even to his mother.

Examination: Fever, 102° F.; pulse, 110; tongue red but not coated; mouth and lips dry; cheeks flushed, chest negative, abdomen slightly tender on right side, where succussion sounds could easily be produced.

I told the parents that there was a possibility of the disease being typhoid, and in fact I thought my suspicions were quite well founded. The next day I made a blood examination which resulted as follows:

Reds	4,000,000	
Whites	13,000	213,800
Hemoglobin	80%	
Neutrophiles	80%	

The results were somewhat of a surprise to me. I expected to find a leucopenia with a neutrophilia, but on the contrary there was a leucocytosis with a neutrophilia. The typhoid bacillus being a germ possessed of negative chemotaxis it was necessary for me to give up my typhoid theory and to substitute something else that conformed with the facts which I did and called the condition one of intestinal autotoxemia, which proved to be correct. When convalescence was established I took the hemoglobin percentage and found it to be 60 per cent., but did not make a farther examination.

In this case a changed diagnosis did not alter the treatment materially.

Case 2.—Mrs. M. consulted me in regard to her daughter who was 17 years of age, and whose health had been failing for the past six months. Menses had ceased four months previous; she had a muddy white complexion, poor appetite, palpitation of the heart on the slightest exertion and a slight cough. She had been told that tuberculosis was the cause of her failing health, and had about given up hopes of her ever being any better.

A careful physical examination revealed a slightly musical heart, but nothing else.

The blood examination showed:

Reds	3,500,000
Whites	7,800
Hemoglobin	30%

This confirmed my diagnosis of chlorosis and excluded tuberculosis which shows a high hemoglobin percentage and a leucopenia with a pathological neutrophilia.

She was immediately put upon Armour's ovarian extract, grs. v., t. i. d., and reduced iron with *bis. sub. nit.*; increasing the iron until the

stools were no longer blackened, this established the dose of iron which was maintained until the end of treatment.

Two months' treatment re-established the physiological functions and relieved the symptoms, and the hemoglobin percentage had raised to 65 per cent., and at the end of four months the blood proved to be normal.

Case 3.—Mrs. R., age 50, consulted me early in the fall on account of a growth, which she had noticed a few days previous in the left upper quadrant of the abdomen. Her strength had been failing all summer, but she had not given her condition serious thought until about the 1st of September, when she was taken with a severe hemorrhage from the stomach.

She had been troubled for some time with diarrhoea, and there was slight oedema of the extremities; the complexion sallow and the features sunken, the tongue was flabby, but not coated and she had had frequent attacks of epistaxis.

Examination of the special organs disclosed nothing of importance until the abdomen was reached, where a growth extending from under the left costal arch reaching half way to the umbilicus could be easily outlined, and there was some tenderness over the descending colon.

The diagnosis was doubtful until the blood examination was made, which showed the following, viz.:

Reds	3,000,000
Whites	450,000
Hemoglobin	40%
Myelocytes	30%

This condition of affairs is only found in spleno medullary leukemia. The myelocytes alone were diagnostic, being found normally only in very few numbers, but constantly and in large numbers in the above named disease.

The treatment was Fowler's sol. in full doses, Fl. Ext. Golden Seal; regulation of the emunctories and nutritious diet.

Two months' treatment showed decided improvement; in four months the tumor was gone and the symptoms relieved, blood examination normal.

At this time the treatment was discontinued; six weeks later the patient noticed a return of the difficulties. Fowler's sol. was again prescribed, and at the present time she is well, but still continues to take the arsenic, which she has been advised to do for at least one year, at the end of which time if nothing unexpected happens it will be discontinued. I am very anxious to know what the future will bring forth in this case.

Case 4.—This is not one calling for a blood examination, but one where a complete diagnosis could have been made without the aid of a microscope.

M. B., age 40, married 12 years, consulted me in regard to his inability to raise a family; his wife is a well formed woman, slightly larger than the average and her cheeks glow with the bloom of health.

The husband had always assumed that he was the disqualifying party, and in consequence of his convictions he had tried to rectify matters by taking treatment of all descriptions, both at home and in a sanitarium.

By careful interrogations I satisfied myself that the procreative functions were successfully and normally carried out as often as common.

The patient was instructed to bring a condom to me containing all the semen ejaculated at one time as soon as possible after intercourse, which he did.

The examination revealed large numbers of living spermatozoa quantity of semen 7cc. I at once told the patient that he had been treating the wrong person and that the fault must be his wife's and not his.

The next day I examined her and found a double cysto salpinx.

The peculiar things about it were that the man had been taking the blame all upon himself, when, in fact, the whole trouble was with his wife; and that a woman could be carrying a pair of cystic tubes around in her pelvic cavity and still never suffer the slightest inconvenience or show any deterioration of health.

I have briefly reported four cases where microscopic examinations have given me a great deal of satisfaction, and now I will give a few of the results.

In the first case the patient received no benefit from the corrected diagnosis, because he would have recovered any way, but it made the prognosis much more favorable and assurance of prompt recovery relieved the parents of a considerable unnecessary worry.

In the second case it confirmed a probable diagnosis which was contrary to what the parents had been told, and made me able to give a favorable prognosis.

In the third case I was able to make a positive diagnosis and institute proper treatment, whereas before I was absolutely at sea, and it is my opinion that if I had not recognized the difficulty early and started her on the right road she would have been dead before now.

In the fourth case the husband at least was satisfied, and I could explain the condition of af-

fairs to them without using the prepositions "if" and "probably" quite as often as is necessary where one is uncertain.

The more ulterior results have been to establish with the people a better faith in the medical profession, and for me to strive more diligently for correct diagnosis, and I believe that a great many times the physician would be able to solve the misty problems of diagnosis much easier and with much more certainty if he would call to his assistance more frequently the microscope, especially in making blood examinations.

P. S. WILLSON, Sec'y.

SCHOOLCRAFT COUNTY.

The Schoolcraft County Medical Society held its regular meeting in Manistique on April 26, 1905.

The following resolutions were unanimously adopted:

Whereas, Under the present State laws an action of damages for malpractice against a physician or surgeon may be brought at any time within three years from date of service, and

Whereas, After a lapse of more than one year much valuable evidence may not be available, and important facts bearing on the case at issue may not be at hand, and

Whereas, One year is always a sufficient time to bring out the results of professional inefficiency or negligence; therefore, be it

Resolved, That the Schoolcraft County Medical Society, in session assembled, do hereby most heartily endorse and approve the bill now pending in the state legislature to reduce the time in which such action may be commenced to one year from date of cause for such action, and further

Resolved, That a copy of these resolutions be immediately forwarded to Hon. Jas. E. Brockway, House of Representatives, Lansing, and

Resolved, That the Representatives and Senator from this district be requested to use all honorable means to secure the passage of said bill.

J. M. SATTLER, Pres.
G. M. LIVINGSTON, Sec'y.

WAYNE COUNTY.

The regular meeting of the Wayne County Medical Society was held May 15, 1905. The following officers were elected: President, A. E. Carrier; Vice-President, C. D. Aaron; Secretary-Treasurer, W. J. Stapleton, Jr.; Board of Directors, H. O. Walker, G. W. Wagner, W. F. Metcalf, H. W.

Longyear, F. B. Tibbals. The following members were elected as a Board of Directors for the Defense League of the Wayne County Medical Society: J. Flintermain, F. W. Mann, F. B. Tibbals, H. W. Longyear, W. F. Metcalf, Guy L. Kiefer.

W. F. STAPLETON, JR., Sec'y.

Medical News.

On the evening of May 2, 1905, over 500 physicians sat down to a farewell banquet given in the ball room of the Waldorf-Astoria. The guest of the evening was William Osler. The toast-master of the evening was James Tyson, of Philadelphia. F. J. Shepherd, of Montreal, spoke on "Osler as a Student and Teacher." J. C. Wilson, of Philadelphia, on "Osler as a Teacher and Clinician." William H. Welch, on "Osler as a Teacher and Consultant." Abram Jacobi, of New York City, on "Osler as an Author and Physician," and S. Weir Mitchell, of Philadelphia, presented "Osler with a Translation of Cicero's Essay on Old Age."

The Interurban Clinical Club was organized at Johns Hopkins Hospital, Baltimore, April 28, 1905, by the following six representations from each of four cities—Baltimore, Philadelphia, New York and Boston—who responded to an invitation extended to them by Osler: Llewellys F. Barker, W. S. Thayer, Thomas B. Dutcher, Thomas McCrae, Charles P. Emerson, and R. I. Cole, of Baltimore; Alfred Stengel, David L. Edsall, Joseph L. Sailer, David Riesman, A. O. J. Kelly, and Warfield T. Longcope, of Philadelphia; Walter B. James, Samuel W. Lambert, Charles N. B. Camac, Theodore C. Janeway, Lewis A. Conner, and Frank S. Meara, of New York; and Richard C. Cabot, Elliott P. Joslin, Joseph H. Pratt, Frederick T. Lord, Edwin A. Locke and Wilder Tileston, of Boston. William Osler, the father of the club, was elected an honorary member. The objects of the club are to stimulate the study of internal medicine, to promote the scientific investigation of disease, to improve the methods of work and teaching of the members and to disseminate a knowledge of the methods of work used in the different cities. Meetings will be held twice a year in the different cities in rotation, at which there will be demonstrations and discussions, but few formal papers. The next meeting will be held in New York, November 10 and 11, 1905. The following

officers were elected: Richard C. Cabot, President; Thomas McCrae, Secretary-Treasurer; Thomas B. Dutcher, A. O. J. Kelly, Lewis A. Conner and Elliott P. Joslin, Councilors. The club was entertained at dinner April 28, 1905, by William Osler.

Because of difficulty with the Medical Director, Dr. James W. Markoe, the entire staff of the N. Y. Lying-in Hospital resigned. Seven thousand confinements occur yearly at this institution.

In spite of persistent, laborious investigation by many experts and cancer laboratories, the progress towards a final solution is mainly, if not exclusively, negative.

The Bellevue Hospital is to cost ten millions of dollars and consume five years in building.

Last year New York City had one hundred and twenty-three dispensaries open a part or all the year. The property of eighty-one of these was \$1,175,436; their receipts about one hundred and twenty-five thousand dollars, and expenditures one hundred and five thousand. These institutions are licensed and regulated by the State Board of Charities—a system which has operated during the past five years. The rules of board as to the conduct of the dispensaries are fairly well observed, so that the doors are well guarded in the large majority of cases, partially in most of the rest, but few being wholly unguarded.

From January 1st, 1905, to April 5th, there were 386 deaths from cerebro-spinal meningitis in Greater New York.

Dr. Gould thinks that an oblique astigmatic axis may cause lateral curvature, resulting from an effort to secure distinct vision by tilting of the head. Query: will spinal curvature result in a healthy person from such position of the head? With the large number of cases of oblique astigmatic axis, cases of spinal curvature should be very common were his contention correct. That a spinal curvature and oblique astigmatic axis may co-exist all may admit. Nor is it impossible that the two may stand in causative relationship. Who has seen a straight spine become curved by the tilting of the head assumed to obtain clearer vision? Why not the lateral spinal curva-

ture cause the head tilting and is the oblique astigmatic axis? We may admit either view if satisfactory proof be adduced.

At the eighth annual meeting of the American Gastro-Enterological Association, held at the Academy of Medicine, New York City, April 24 and 25, 1905, the following officers were elected for the ensuing year: President, H. W. Bettmann, of Cincinnati; First Vice-President, S. W. Lambert, of New York City; Second Vice-President, John P. Sawyer, of Cleveland; Secretary-Treasurer, Charles D. Aaron, of Detroit. Councilors, William G. Morgan, of Washington; A. L. Benedict, of Buffalo, and J. Kaufmann, of New York.

The eighth general conference of health officials in Michigan will be held under the auspices of the Michigan State Board of Health, in the new medical building of the university in Ann Arbor, Thursday and Friday, June 1 and 2, 1905.

The objects of the conference are: The presentation of facts and the general comparison of views by the health officers and other delegates of local boards of health, among themselves, with the members of the State Board of Health and with those in charge of the state laboratory of hygiene, and especially with reference to the duties of supervisors, and other presidents of local boards of health. Health officers, and other officials, relative to the restriction of the dangerous communicable diseases and relative to other subjects bearing upon the public health service of the state.

This will not be a medical conference, it is for all health officers and delegates, professional and non-professional. It is expected to have the most advanced scientific presentation of facts in important branches of sanitary science; and it is hoped that public health administration will be dealt with by health officers and others who have had experience, or have given those subjects much thought. Such discussions are not restricted except by the shortness of time at the disposal of the conference. Every delegate is expected to contribute his part for the general good of the people of Michigan.

This conference of health officials is held for the benefit of every locality in Michigan. It is hoped that many localities may have delegates there, thus securing the most direct benefits. Every state and local officer there will probably learn much that will enable him to do better service in guarding the public health. It is believed

that any city or village can legally and properly send a delegate. This board has no doubt on this point or it would not have called the conference. It is hoped also that many townships not too distant and even distant ones, if specially exposed to the introduction and spread of disease, may each send a delegate.

The papers and discussions will be of sufficient practical importance to the delegates, in their future work for their several localities, to well repay the expense incurred by their localities in sending them to this conference.

Prominent sanitarians from outside the state are expected to be present, and to aid toward the success of the conference.

Your board of health is urgently solicited to send at least one delegate to this conference.

A program will be issued later.

By direction of the State Board of Health.

Very respectfully,

FRANK W. SHUMWAY, M. D., Sec'y.

The Secretary of War has approved the recommendation of the Surgeon General for the erection of a new general army hospital nearly opposite the Battle National Cemetery. The property contains 43 acres, and cost about \$98,000. The limit of cost of the hospital as fixed by Congress was \$300,000.

The sixth annual meeting of the American Roentgen Ray Society will be held at Baltimore, September 28-30, 1905. The paper of the first day will deal with X-ray diagnosis, and those of the second and third days, therapeutics. Russell H. Biggs, of Pittsburgh, is Secretary.

Members of the Clinton, Shiawassee, Genesee and Livingston County Medical Societies held a joint meeting at Durand, May 11, 1905, and formed the Sixth Councilor District Medical Society. C. B. Burr of Flint was chosen president, and P. S. Willson of Owosso secretary. Several papers were read, including one "On the Work of the State Board of Registration in Medicine," by W. H. Sawyer of Hillsdale, which will appear in the July, 1905, issue of this JOURNAL. Preceding the reading of these papers a reception and informal luncheon was served by the Durand physicians to the visiting doctors. Following the paper a dinner was served, A. M. Hume of Owosso acting as toastmaster. All present had a most enjoyable time.

Program of Conference of Health Officials of Michigan (Ann Arbor)—

FIRST SESSION.—Thursday, June 1, at 2:00 P. M. (Standard Time).

1. A Statement of the Objects of the Conference, by Victor C. Vaughan, M. D., President of State Board of Health.

2. Municipal Water Supplies, by Gardner S. Willianis, C. E., Department of Engineering, University of Michigan.

3. The Status of Typhoid Fever at Escanaba, by Oscar C. Breitenbach, M. D., Health Officer of Escanaba.

4. Report on the Sanitary Analyses of Drinking Water made in the Hygienic Laboratory of the University of Michigan from January 1, 1904, to June 1, 1905, by Prof. John F. Eastwood, Hygienic Laboratory.

5. Report on the year's work in the Pasteur Institute, University of Michigan, by Thomas B. Cooley, M. D., Director of the Institute.

6. Disinfection with Formaldehyde Saturated with Potassium Permanganate, by James G. Cummings, M. D., Pasteur Institute.

SECOND SESSION.—Thursday, June 1, at 8:00 P. M. (Standard Time.)

1. Modern Sanitation, by Malcolm C. Sinclair, M. D., Member of State Board of Health.

2. The Benefits of a State Sanatorium for Tuberculosis, by Angus McLean, M. D., Member of State Board of Health.

3. Organized Effort in Restricting Tuberculosis, by Thomas M. Koon, M. D., Health Officer of Grand Rapids.

4. General Discussion on Tuberculosis, opened by Frank W. Shumway, M. D., Secretary of State Board of Health.

THIRD SESSION.—Friday, June 2, at 10:00 A. M. (Standard Time.)

1. The Heating and Ventilation of Residences, by John R. Allen, C. E., Engineering Department, University of Michigan.

2. Restriction of Smallpox, by Thomas B. Cooley, M. D., Pasteur Institute.

3. The Milk Problem, by Guy L. Kiefer, M. D., Health Officer of Detroit.

4. Discussion of the Milk Problem, by Prof. Charles E. Marshall, Agricultural College.

FOURTH SESSION.—Friday, June 2, at 2:00 P. M. (Standard Time.)

1. Street Flushing the most Rational Means of Abating the Dust Nuisance, by A. H. Coté, M. D., Health Officer of Port Huron.

2. The Malarial Parasites of Birds, by F. G. Novy, M. D., Department of Hygiene, University of Michigan.

3. General Discussion on the Powers and Duties of Health Officers.

4. Miscellaneous business.

5. Closing of the Conference.

The Northern Tri-State Medical Association will hold its 32nd annual meeting June 15, 1905, at Fort Wayne, Ind. The Fort Wayne Medical Society has made arrangements to entertain all the visiting physicians royally.

GEORGE W. SPOHN, Pres., Elkhart, Ind.

ELSE T. MORDEN, Secy.,
Adrian, Mich.

William M. Edwards, who has been for many years Medical Superintendent of the Michigan Asylum for the Insane at Kalamazoo, died recently at the University Hospital at Ann Arbor. Dr. Edwards was born near Peru, Indiana. He graduated from the Medical Department at Ann Arbor in 1884. He was a regular attendant at the state society meetings. His absence will be sadly missed by all who knew him.

E. K. Herdman was re-elected City Physician of Ann Arbor.

V. C. Vaughan, Ann Arbor, has been elected Vice-President of the American Society of Tropical Medicine.

The County Auditors of Detroit have appointed Drs. E. B. Forbes and I. L. Polozker County Physicians of that city for the year 1905.

Miscellaneous.

CHANGE IN MEMBERSHIP.

(April 15th to May 15th.)

NEW MEMBERS.

T. P. Camelon, Detroit, Mich.
J. D. Campbell, Hopkins, Mich.
L. R. Cobb, Belleville, Mich.
J. H. Crosby, Otsego, Mich.
E. P. Edwards, Grand Rapids, Mich.
J. P. Ferguson, Middleville, Mich.
C. E. McCallum, Midland, Mich.
W. H. Matchett, Hancock, Mich.
C. S. Oakman, Detroit, Mich.
S. B. Rolison, Hesperia, Mich.
H. Post, Belleville, Mich.
C. M. Stuck, Plainwell, Mich.
C. G. Suylandt, Gladwin, Mich.
E. R. Swift, Coleman, Mich.
E. G. Wilson, Detroit, Mich.

CHANGE OF ADDRESS.

F. Huntley, Manton, Mich.
A. T. McLennan, Battle Creek, Mich.
E. A. Planck, Union, Mich.
T. H. Prust, Peterboro, Ont.

DIED.

W. M. Edwards, Kalamazoo, Mich.

BOOKS RECEIVED.

INTERNATIONAL CLINICS. Vol. I, Fifteenth Series. J. B. Lippincott Co., 1905.

A TREATISE ON ACUTE CONTAGIOUS DISEASES. By William M. Welch, M. D., and Jay F. Schamberg, A. B., M. D. Lea Brothers & Co., 1905.

TRANS. OF THE COLLEGE OF PHYSICIANS. Third Series. Vol. XXVI. 1904.

PROGRAM
OF THE
40th Annual Meeting
OF THE
Michigan State Medical
Society



At the New Arlington Hotel,
Petoskey, Mich.

Wednesday, Thursday and Friday,
June 28, 29 and 30, 1905.

THE COUNCIL

THE NEW ARLINGTON.

Chairman—LEARTUS CONNOR, Detroit.
Secretary—W. H. HAUGHEY, Battle Creek.

Tuesday, June 27th, 7 o'clock P. M.

Wednesday, June 28th, 2 o'clock P. M.

Thursday, June 29th, 2 o'clock P. M.

Organization and Election of Officers.

HOUSE OF DELEGATES

THE NEW ARLINGTON.

President—D. B. HARISON, Sault Ste. Marie.
General Secretary—A. P. BIDDLE, Detroit.

BY-LAWS—CHAPTER IV, Section 1. Each Component County Society shall be entitled to send to the House of Delegates each year one delegate and one alternate for every 50 members, and one for each major fraction thereof; but each County Society holding a charter from this Society, which has made its annual report as provided in this Constitution and By-Laws, shall be entitled to one delegate and one alternate.

FIRST DAY, WEDNESDAY, JUNE 28th.

8:30 A. M.

1. Call to order by the President.
2. Roll Call.
3. Reading of Minutes of the last Annual Meeting.
4. Report of the Council.
LEARTUS CONNOR, Detroit, Chairman.
5. Report of Committee on Legislation and Public Policy.
W. H. SAWYER, Hillsdale, Chairman.
6. Report of National Legislative Council, A. M. A.
EMIL AMBERG, Detroit, Michigan Member.
7. Miscellaneous Business.
 - a) Appointment of Committee on Nominations to nominate:
 - 1st, 2d, 3d and 4th Vice-Pres.
 - 2 Representatives in House of Delegates, A. M. A., for 2 years.

PROGRAM OF ANNUAL MEETING.

Jour. M. S. M. S.

- 4 Councilors for 6 years.
(4th, 5th, 7th and 10th Councilor Districts.)
- To fix Place of Meeting for 1906.
- b) Appointment of other Working Committees.
- c) Amendment to Constitution.

An amendment to Article V of the Constitution relative to the House of Delegates, which now reads: "The House of Delegates shall be the legislative and business body of the Society, and shall consist of (1) delegates elected by the Component County Societies, and (2) *ex-officio*, the officers of the Society as defined in this Constitution," by adding after the word "Constitution," "without power to vote." (See Constitution, Art. XIII. Amendments.)

- d) Proposed Amendment to By-Laws.

To amend Chapter XIII, Sec. 11, which reads:

SEC. 11. At the first meeting after JANUARY 1ST, due notice having been given, each County Society shall elect annually a delegate or delegates to represent it in the House of Delegates of this Society in the proportion of one delegate to each FIFTY members or major fraction thereof (see By-Laws, Chapter IV, Sec. 1). The Secretary of the County Society shall immediately send the list of its delegates to the Secretary of this Society.

To read:

At the Annual Meeting in the Fall or at the first meeting after January 1st, due notice having been given, each County Society shall elect annually a delegate and an alternate or delegates and alternates to represent it in the House of Delegates of this Society in the proportion of one delegate and one alternate to each fifty members or major fraction thereof. (See By-Laws, Chapter IV, Sec. 1.) The Secretary of the County Society shall immediately send the list of its delegates and alternates to the General Secretary of this Society.

Adjournment to General Meeting.

SECOND DAY, THURSDAY, JUNE 29th.

9 A. M.

1. Reading of Minutes of Previous Meeting.
2. Unfinished Business.
- a) Amendment to By-Laws, Chap. XIII, Section 11.
(See d of previous meeting.)

3. Report of Committee to petition the Legislature for an appropriation for the establishment of a properly equipped Sanitarium for the Treatment of the Early Stages of Tuberculosis.

HENRY J. HARTZ, Detroit, Chairman.

4. Report of Committee to encourage the Systematic Examination of Eyes and Ears of School Children throughout the State.

W. R. PARKER, Detroit, Chairman.

5. Miscellaneous Business.

a) Report of Committee on Nominations.

Adjournment to General Meeting.

THIRD DAY, FRIDAY, JUNE 30th.

9 A. M.

1. Reading of Minutes of Previous Meeting.

2. Unfinished Business.

3. Report of Committee on Vital Statistics.

H. B. BAKER, Lansing, Chairman.

4. Miscellaneous Business.

- a) Amendment to Constitution.

To amend Art. VIII, Sec. 1, which reads:
"The officers of this Society shall be a President, four Vice-Presidents, a Secretary, a Treasurer, and Twelve Councilors," by inserting the word "General" before "Secretary" and adding, an "Assistant Secretary," to read a "General Secretary, an Assistant Secretary."

(See Art. XIII. Amendments.)

Adjournment to General Meeting.

GENERAL MEETING

THE NEW ARLINGTON.

President—D. B. HARISON, Sault Ste. Marie.
General Secretary—A. P. BIDDLE, Detroit.

FIRST DAY, WEDNESDAY, JUNE 28th.

10:30 A. M.

1. Call to order.

2. Prayer REV. F. R. GRODOLPHIN.

3. Address of Welcome

HON. GEO. E. REYCRAFT, Mayor.

4. Report of Committee on Arrangements.

J. J. REYCRAFT, Chairman.

5. Report from the House of Delegates.
A. P. BIDDLE, Detroit, General Secretary.
6. Report of Michigan Member of Committee on Transportation, A. M. A.
F. W. ROBBINS, Detroit, Chairman.
7. Address of the President.
D. B. HARISON, Sault Ste. Marie.
"The Present Status of the Medical Profession in Michigan."
8. Miscellaneous Business.
a) Nominations for President.

Adjournment.

8 P. M.

Scientific Exhibit.

Lantern Slide Demonstrations on "Tissue-bits in the Stomach-washing and Their Aid to Diagnosis."

A. S. WARTHIN and D. M. COWIE, Ann Arbor.
X-ray Slides of "Diseases of the Gastro-Intestinal Tract."
P. M. HICKEY, Detroit.

9:30 P. M.

Entertainment by the Emmet County Medical Society.

SECOND DAY, THURSDAY, JUNE 29th.

10:30 A. M.

1. Unfinished Business.
2. Report of Committee to secure data regarding the Prevalence of Venereal Diseases in Michigan.
A. E. CARRIER, Detroit, Chairman.
3. Oration on Surgery
F. B. WALKER, Detroit.
"Surgery and Human Welfare."
Introductory. Historical. Status of Medicine and Surgery in Remote Past. Comparison. Development of Surgery. Effect on Human Welfare. Comparison. Prospect.
4. Oration on General Medicine
COLLINS H. JOHNSTON, Grand Rapids.
"The Administrative Control of Tuberculosis."
5. Miscellaneous Business.

Adjournment.

6 P. M.

Banquet at the New Arlington.

THIRD DAY, FRIDAY, JUNE 30th.

10:30 A. M.

1. Unfinished Business.
2. Report from the House of Delegates.
A. P. BIDDLE, Detroit, General Secretary.
3. Oration on Obstetrics and Gynecology.
RICHARD R. SMITH, Grand Rapids.
"Is Gynecology to Remain a Separate Specialty?"
4. Miscellaneous Business.

At 12 o'clock the Committee on Nominations will announce the result of the ballot for President.

*Introduction of President Elect.**Adjournment.*

SECTION ON GENERAL MEDICINE

THE NEW ARLINGTON.

The Secretary of the Section will collect all papers as soon as read.

Members will please hand in their discussions in writing to the Secretary of the Section before leaving.

Chairman—JOHN J. REYCRAFT, Petoskey.
Secretary—H. B. BRITTON, Ypsilanti.

FIRST DAY, WEDNESDAY, JUNE 28th.

1:30 P. M.

1. Why Surgical Fixation of Movable Kidney Will Not Relieve Dyspeptic and Nervous Symptoms.
CHAS. D. AARON, Detroit.
Reports of surgeons maintaining that movable kidney should be classed as a medical disease and not to be operated upon. Medical treatment as a means for restoring prolapsed kidney to its normal position not generally known to physicians. Medical treatment the only rational method, excepting in cases of Dietl's crisis, proven by results. Why surgical intervention does not relieve dyspeptic and nervous symptoms. Method of successful treatment.
2. Skiagraphy of the Chest. Illustrated.
P. M. HICKEY, Detroit.
3. Ascending Neuritis.
WM. J. HERDMAN, Ann Arbor.

Neuritis a very common disorder. Its presence oftentimes not recognized, the symptoms being attributed to other less definite forms of disease, as neuralgia, rheumatism, lumbago, etc.

The treatment for this reason is inexact and often inefficient. An ascending course to a neuritis unusual. Yet it may ascend and involve a plexus higher up or even invade the cord or brain. The grave consequences of such extension. Several cases illustrating neuritis of this form.

4. Diseases Communicated to Man from the Lower Animals.

W.M. F. BREAKY, Ann Arbor.

1. Systemic diseases resulting from infection, immediate or mediate: *a.* (eg., diphtheria, equina, anthrax, rabies, variola). *b.* Infection through intermediary carriers or hosts, such as flies, mosquitoes (eg., malaria, yellow fever, plague, elephantiasis).
2. Parasitic Diseases (*a*) resulting from ingestion of animal food (eg., some of the entozoa, echinococcus, trichina, cysticerci, tuberculosis).
(*b.*) More especially of the skin (eg., acarus scabiei or sarcoptes, tinea trichophytina, and the various communicable dermatoses).

Need for better prophylaxis, and dissemination of information through channels of preventive medicine. Determination of diagnosis. Treatment.

5. Venereal Prophylaxis.

ALBERT E. CARRIER, Detroit.

Is prophylaxis of venereal diseases demanded? Are legal restrictions of value? Should venereal diseases be reported? Should a physical examination be made of those about to marry? Education of the masses in order that they may avoid innocent contraction of venereal diseases. What means shall be adopted to instruct the laity regarding the dangers to sufferers who contract venereal diseases?

6. Some Difficulties in the Diagnosis of Syphilis.

JAMES F. BREAKY, Ann Arbor.

The wide spread distribution of the disease and its extreme prevalence in all communities and classes. The varying degrees of its intensity or malignancy in different individuals, or, the individual factor. Coincidental conditions and diseases in syphilitics of various stages. Variations in classic symptoms in: Primary stage—Multiple lesions, mixed infections, extragenital lesions. Secondary stage—Variations in eruptions, delayed eruptions, influence of treatment, coincident exanthemata and skin diseases. Tertiary stage—Gummata and bone necrosis, joint disease, syphilis of the nervous system. Hereditary—Degrees of manifestations dependent upon apparent attenuation of the infection and individual factor in parents, influence of ante-natal treatment.

7. Dispensing Physicians.

H. B. GARNER, Traverse City.

Medicine and pharmacy regarded as one science in middle ages.

Reasons why this is now impracticable.

Objections to prescription writing.

What is the true object of dispensing?

SECOND DAY, THURSDAY, JUNE 29th.

1:30 P. M.

1. A New Method for the Withdrawal of Pleural Effusions.

W. M. DONALD and R. E. MERCER, Detroit.

The authors propose to demonstrate the method of withdrawal of pleuritic effusion of a serous character by the use of an aspiratory apparatus, new to this country, but used by Italian clinicians for some years past, and also the introduction of either sterilized or filtered air to replace the effusion and to splint the lung until natural conditions of the pleural and lung tissue are restored.

The method bears resemblance to that of Murphy, of Chicago, in the treatment of Pulmonary Tuberculosis by a splint of nitrogen gas in the pleural cavity.

2. The Value of Rectal Exploration as an Aid to Diagnosis in Diseases of Children.

LOUISE ROSENTHAL-THOMPSON,
Traverse City.

The importance of rectal explorative aid in bimanual palpation in diagnosing difficult cases occurring in children. Method of examination. Cases illustrating the value of the procedure.

3. The Medical Inspection of Schools.

GUY L. KIEFER, Detroit.

History of medical inspection of school children. Cities in which such inspection is done. Objects of inspection. Medical inspection of schools in Detroit, results obtained by same. Diseases for which children are excluded from Detroit schools. Effect of medical inspection on the prevalence of such diseases. How system should be extended and enlarged. Conclusion.

4. Infant Mortality in Michigan.

HERBERT M. RICH, Detroit.

Significance of Infant Mortality. Statistics of Michigan and Detroit compared with other parts of the United States. Tables. Importance of infant diarrhea. General mortality rate. Conclusions. Reasonable infant mortality. Some popular fallacies regarding causes of infant mortality. Conclusions from statistics. Opinions on which diseases may be called "preventable." Application of consensus of opinion to statistics of Michigan, showing what part of our mortality is preventable. Conclusions.

5. Indigestion in Infancy and Its Relation to Summer Diarrhea.

CHAS. DOUGLAS, Detroit.

Foods of infants. Digestive secretions and amounts thereof. Results of improperly digested foods as prodromal evidences of diarrhea. The great necessity of avoiding these digestive disturbances in warm weather.

6. Asthma and Hay Fever.

R. B. ARMSTRONG, Charlevoix.

7. Intestinal Antisepsis. Report of a Series of Experiments on Animals.

S. EDWARD SANDERSON, Detroit.

Realizing the lack of positive knowledge in this field, the author has carried on a series of experiments on the living animal to gain positive data.

THIRD DAY, FRIDAY, JUNE 30th.

1:30 P. M.

Election of Orator, Chairman and Secretary (for two years) of Section.

1. Psychotherapeutics of Neurasthenia.

JEANNE C. SOLIS, Ann Arbor.

The etiology, symptoms, pathology, diagnosis and treatment of neurasthenia, with special reference to the psychical symptoms and their treatment.

2. Neurasthenia.

C. W. HITCHCOCK, Detroit.

Need of its recognition as a real entity.

Not by any means generally due to displaced viscera.

Pathology for obvious reasons not so firmly established as in the evidently organic diseases; yet suggestive advances made in its direction.

Diagnosis, differential and other. Its border-line position.

Varieties: The mooted traumatic neurasthenia.

Symptomatology necessarily varied.

Treatment too cavalierly dismissed by the superficial and the doubting.

The importance here of physiological therapeutics, patiently, thoughtfully and scientifically applied.

3. Traumatism and Shock as a Factor in the Production of Nervous and Mental Diseases.

SAMUEL BELL, Detroit.

Growing importance of the subject in keeping with increase of population and increased liability to accident due in part to modern methods of transportation.

Brief resume of railroad accidents, steam and electric, during the year 1904, as gathered from statistics of the Interstate Commerce Commission, as compared with those which occurred in Europe during same period.

Effects of injuries upon the head as a factor in the production of mental and nervous disease, severity of injury not bearing any constant relation to the severity of the mental aberration.

Importance of consideration of Railroad and Electric accidents on account of legal questions involved in which the physician and surgeon play an important part.

Some of the more immediate physical results of injury.

Pathology of neuroses and psychoses due to trauma.

Brief report of clinical cases due to trauma, both mental and physical (shock), where the physical trauma was absent, entirely psychical.

4. Psychology in Medicine.

W. E. NEWARK, Charlotte.

Is psychology a legitimate field of medicine? What is the physician's position in regard to its practice?

Should we not treat the subject in the light of modern science, thus rescuing it from the charlatans and quacks?

5. Intermittent Claudication.

JOHANN FLINTERMANN.

History of our knowledge of the Disease—Pathology, Symptoms, Diagnosis, Prognosis, Treatment.

6. The Physiological and Chemico-physical Action and Effect of Mt. Clemens Mineral Baths.

RICHARD LEUSCHNER, Mt. Clemens.

7. Report of 105 Consecutive Cases of Typhoid Fever.

R. S. ROWLAND, Detroit.

With especial reference to Diagnosis, Complications and Treatment.

SECTION ON SURGERY, OPHTHALMOLOGY AND OTOTOLOGY

THE NEW ARLINGTON.

The Secretary of the Section will collect all papers as soon as read.

Members will please hand in their discussions in writing to the Secretary of the Section before leaving.

Chairman—E. C. TAYLOR, Jackson.

Secretary—John W. MOORE, Atlantic Mine.

FIRST DAY, WEDNESDAY, JUNE 28th.

1:30 P. M.

1. Thrombosis of Anterior Tibial Artery in Gunshot Wound.

L. W. GARDNER, Harbor Springs.

Thrombosis of anterior tibial artery in gunshot wound of right limb in a lady 62 years of age occurring in Emmet County, Feb. 5th, 1905, and treated in Lockwood hospital, Petoskey.

2. The Intestine Surgically Considered, with special reference to its Sterilization. A New Open Method for Lateral Anastomosis.

S. EDWARD SANDERSON, Detroit.

3. Treatment of Ophthalmia Neanatorum.

EUGENE SMITH, Detroit.

4. The Recognition and Management of Acute Mastoiditis by the General Practitioner.
LEARTUS CONNOR, Detroit.
5. Overlooked Anomalies of the Eye with Pronounced Nervous Reflexes.
A. E. BULSON, Jackson.
6. Eye Strain Reflexes.
CALVIN R. ELWOOD, Menominee.
7. Disorders from Eye Strain.
O. A. GRIFFIN, Ann Arbor.
8. The Methods of the Total Opening of the Middle Ear (so-called Radical operation) with Stacke's Method (Illustrated).
EMIL AMBERG, Detroit.

3. Report of Four Cases of Cholecystectomy with Specimens.
H. O. WALKER, Detroit.
4. The Avoidance of Traumatism during Physical Examination.
ALEXANDER MACKENZIE CAMPBELL, Grand Rapids.
5. A Preliminary Note on the Sterilization and Absorbability of Catgut.
C. B. NANCREDE, C. F. TENNEY, F. R. WALDRON, Ann Arbor.
6. Do Patients die from Paralysis or Mechanical Obstruction of the Bowels following Laparotomy.
F. J. W. MAGUIRE, Detroit.
7. Congenital Bilateral Fusion of upper end of Radius with Ulna.
W. E. BLODGETT, Detroit.

SECOND DAY, THURSDAY, JUNE 29th.

1:30 P. M.

1. Diagnosis and Treatment of Empyema of the Chest.
A. I. LAWBAUGH, Calumet.
2. Wound Infection Resulting from the Use of Etage Sutures.
S. C. GRAVES, Grand Rapids.
3. Bladder Neoplasms. Why so generally hopeless.
F. W. ROBBINS, Detroit.
4. Treatment of Compound Fractures with Crushing of the Soft Parts.
W. T. DODGE, Big Rapids.
5. Statistics of Cancers and Tumors.
T. A. McGRAW, Detroit.
6. Skin Grafting. Autoplastic, Heteroplastic, Transportation by Pedical Method. Time of Growth, etc.
ANGUS MCLEAN, Detroit.
7. A Few Results of Roentgen-Ray Therapy with Report of Cases.
CONRAD GEORGE, JR., Ann Arbor.

THIRD DAY, FRIDAY, JUNE 30th.

1:30 P. M.

Election of Orator, Chairman and Secretary (for two years) of Section.

1. Ulcerations of Ano-Rectal Region.
LOUIS J. HIRSCHMAN, Detroit.
2. Gangrene of the Scrotum.
A. W. HORNBGEN, Marquette.

SECTION ON OBSTETRICS AND GYNECOLOGY

THE NEW ARLINGTON.

The Secretary of the Section will collect all papers as soon as read.

Members will please hand in their discussions in writing to the Secretary of the Section before leaving.

Chairman—A. N. COLLINS, Detroit.
Secretary—FLORENCE HUSON, Detroit.

FIRST DAY, WEDNESDAY, JUNE 28th.

1:30 P. M.

1. The Relation of the Physician to his Pregnant Patient.
W. P. MANTON, Detroit.
Attention called to some of the questions relating to the hygiene and management of pregnancy, and attempt to point out why the physician should instruct his patient in the manner of life which she should pursue during this trying period.
2. The Technique of Labor.
WALTER HUME SAWYER, Hillsdale.
3. The Uses and Abuses of the Obstetric Forceps.
J. J. MULHERON, Detroit.
Proper application presupposes a correct diagnosis of presentation. Proper traction involves a correct knowledge of the mechanism of labor. As an aid to diagnosis of presentation external palpation is indispensable. Undue tractive force is to be deprecated. The value of the forceps and its use in correcting occipito-posterior presentations.

4. Accouchment Forcé.

EDWARD T. ABRAMS, Dollar Bay.

The tampon, bag, metal, and manual dilation. Cervical incisions. Vaginal Cesarian section. Conservative Cesarian section. The Bossi dilator.

5. Placenta Praevia.

G. W. NIHART, Petoskey.

6. Puerperal Sepsis.

WM. F. METCALF, Detroit.

Preventive treatment. Curettage. Cul-de-sac incision. Hysterectomy. Serum therapy. Prognosis.

SECOND DAY, THURSDAY, JUNE 29th.

1:30 P. M.

1. Ligament Operations for Uterine Retrodisplacements.

J. WESLEY BOVEE, Washington, D. C.

2. A New Method of Shortening the Round Ligaments.

J. H. KELLOGG, Battle Creek.

The round ligaments are the only natural and suitable anterior supports of the uterus. Ventral fixation and other methods either fail or are subject to serious inconveniences. Permanent retroversion cannot occur without abnormal lengthening of the round ligaments. Naturally then the radical remedy is to be found in shortening these ligaments. The ordinary external method is open to one objection, the possibility of hernia. With proper care this is removed.

The new method, described in the paper, shortens the ligaments by drawing up a loop of each ligament through the rectus muscle, through a median incision. The loops are arranged to meet at the median line beneath the sheath of rectus which is closed over them. There is no danger of hernia with this method. This is especially applicable in cases of retroversion, in which the abdomen has been opened for removal of the appendages or some other purpose. This method has been employed in about twenty-five cases with uniformly good results.

3. Vaginal and Uterine Prolapse.

J. H. CARSTENS, Detroit.

Relief by pessaries, then a plastic operation. Ventral fixation and suspension. Finally, vaginal hysterectomy.

4. Abdominal versus Vaginal Route for Intra-Abdominal Conditions in the Female.

WILLIAM BISHOP, Bay City.

Abdominal route permits inspection of all of the abdominal and pelvic viscera; and conditions in addition to the one operated upon but not clear enough to have been diagnosticated may be removed.

Bowels, bladder and ureter often injured while performing vaginal section. Often necessary to open abdomen after having begun the operation through the vagina.

5. Congenital Umbilical Hernia.

H. WELLINGTON YATES, Detroit.

JAMES E. DAVIS, Detroit.

Report of two cases operated, with observations thereon, measurements of tumors, contents of sacs, etc. Review of literature.

6. Post-operative Femoral Phlebitis—With Special Reference to the Prognosis.

BENJAMIN R. SCHENCK, Detroit.

7. Tubercular Peritonitis.

J. G. LYNDS, Ann Arbor.

Varieties. Parts most frequently first attacked. Diagnosis. Prognosis. Treatment, Medical and results, Surgical and results.

THIRD DAY, FRIDAY, JUNE 30th.

1:30 P. M.

Election of Orator, Chairman and Secretary (for two years) of Section.

1. Ectopic Gestation.

JAMES W. McMEEKIN, Saginaw.

2. The Frequency of Ectopic Gestation.

JAMES A. KING, Manistee.

1. Changes the whole subject of ectopic gestation has undergone in past ten or twelve years. Ancients supposed it to be a very rare condition and confounded it with haematocele.

2. Recent data relative to its frequency rare. General practitioner apt to underestimate the number of cases he is likely to meet. Necessity of emphasizing its frequency great. Lack of early recognition of rupture serious in its consequences. Extreme pain, profound shock, collapse, marked evidence of hemorrhage, signs emphasized formerly, now known to be frequently absent. Ectopic pregnancy probably as frequent in exposed females between twenty-five and forty as appendicitis.

3. A few illustrative cases of unrecognized extra uterine pregnancy.

3. A Case of late Posterior, Mesometric Pregnancy.

H. W. LONGYEAR, Detroit.

A brief resume of the etiology and pathology of Ectopic pregnancy. Case an excellent illustration of the downward rupture of the pregnant tube, with development of the fetus to full time in the broad ligament, with consequent dissection of peritoneum from posterior pelvic wall.

4. Ectopic Pregnancy.

W. K. WEST, Calumet.

Report of case with unusual post operative complications.

5. Important Factors in the Success of Abdominal Operations.

LOUIS J. HIRCHMAN, Detroit.

The operator himself, care and sterilization of his hands, anesthesia, preparation of patient, time of day, prevention of nausea, preparation of field of operation, practical points in technique, prevention of adhesions, avoidance of shock, drainage, wound closure, after treatment.

6. Dilatation of the Cervix Uteri.

S. EDWARD SANDERSON, Detroit.

A consideration of some of the principles involved, exhibition of a new instrument for dilatation.

OFFICERS OF THE SOCIETY.

President—B. D. HARISON.....Sault Ste. Marie
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General Medicine—JOHN J. REYCRAFT, Petoskey, *Chairman*; H. B. BRITTON, Ypsilanti, *Secretary*.
Surgery, Ophthalmology and Otology—E. C. TAYLOR, Jackson, *Chairman*; JNO. W. MOORE, Atlantic Mine, *Secretary*.
Obstetrics and Gynecology—A. N. COLLINS, Detroit, *Chairman*; FLORENCE HUSON, Detroit, *Secretary*.

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Third District—Calhoun, Cass, Eaton, St. Joseph.	
Fourth District—Allegan, Berrien, Kalamazoo, Van Buren.	
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Sixth District—Clinton, Genesee, Livingston, Shiawassee.	
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Eighth District—Gratiot, Isabella, Midland, Saginaw, Tuscola, Clare and (Gladwin unattached).

Ninth District—Benzie, Charlevoix (including Antrim), Grand Traverse (including Leelanaw), Kalkaska, Manistee, Mason, Missaukee, Wexford.

Tenth District—Alpena (including Alcona), Bay (including Arenac and Iosco), Cheboygan, Emmet, O., M., C., O., R., O., (Otsego, Montgomery, Crawford, Oscoda, Roscommon and Ogemaw combined), and Presque Isle.

Eleventh District—Mecosta, Montcalm, Muskegon (including Oceana), Newaygo, Osceola (including Lake).

Twelfth District—Chippewa (including Luce and Mackinac), Delta, Dickinson-Iron, Gogebic, Houghton (including Baraga, Keweenaw and Ontonagon), Marquette (including Alger), Menominee, Schoolcraft.

DELEGATES TO THE AMERICAN MEDICAL ASSOCIATION.

H. O. WALKER, Detroit, term expires 1905.
 V. C. VAUGHAN, Ann Arbor, term expires 1905.
 W. K. WEST, Calumet, term expires 1906.
 CHAS. B. STOCKWELL, Port Huron, term expires 1906.

MICHIGAN MEMBER OF THE NATIONAL LEGISLATIVE COUNCIL OF THE AMERICAN MEDICAL ASSOCIATION.

EMIL AMBERG, Detroit.

PERMANENT COMMITTEES.

ON SCIENTIFIC WORK.
 B. D. HARISON, Sault Ste. Marie, *Chairman*.
 A. P. BIDDLE, Detroit, *General Secretary*.
 JOHN J. REYCRAFT, Petoskey.
 E. C. TAYLOR, Jackson.
 A. N. COLLINS, Detroit.
 H. B. BRITTON, Ypsilanti.
 JOHN W. MOORE, Atlantic Mine.
 FLORENCE HUSON, Detroit.

ON SCIENTIFIC EXHIBIT.
 A. S. WARTHIN, Ann Arbor, *Chairman*.
 P. M. HICKEY, Detroit.
 D. M. COWIE, Ann Arbor, *Secretary*.

ON ARRANGEMENTS.
 JOHN J. REYCRAFT, Petoskey, *Chairman*.
 GEORGE W. NIHART, Petoskey.
 HENRY T. CALKINS, Petoskey.
 EDWARD A. RUNYAN, Harbor Springs.
 ALBERT STALEY, Pellston.
 GEORGE E. REYCRAFT, Petoskey.

ON LEGISLATION AND PUBLIC POLICY.
 W. H. SAWYER, Hillsdale, *Chairman*.
 JAMES W. INCHES, Saint Clair.
 D. B. CORNELL, Saginaw.
 F. B. TIBBALS, Detroit.

ON VITAL STATISTICS.
 H. B. BAKER, Lansing, *Chairman*.
 A. H. ROCKWELL, Kalamazoo.
 G. G. BARNETT, Ishpeming.

SPECIAL COMMITTEES.

TO PETITION THE LEGISLATURE FOR AN APPROPRIATION FOR THE ESTABLISHMENT OF A PROPERLY EQUIPPED SANITARIUM FOR THE TREATMENT OF THE EARLY STAGES OF TUBERCULOSIS.

H. J. HARTZ, Detroit, *Chairman.*

J. B. WHINERY, Grand Rapids.

BENJAMIN F. HORNER, Lake Odessa.

C. N. SOWERS, Benton Harbor.

B. R. SHURLY, Detroit.

TO ENCOURAGE THE SYSTEMATIC EXAMINATION OF THE EYES AND EARS OF SCHOOL CHILDREN THROUGHOUT THE STATE.

WALTER R. PARKER, Detroit, *Chairman.*

C. H. BAKER, Bay City.

JOHN R. ROGERS, Grand Rapids.

MICHIGAN MEMBER OF COMMITTEE ON TRANSPORTATION, AMERICAN MEDICAL ASSOCIATION.

F. W. ROBBINS, Detroit.

TO SECURE DATA REGARDING PREVALENCE OF VENEREAL DISEASES IN MICHIGAN.

A. E. CARRIER, Detroit, *Chairman.*

RALPH H. SPENCER, Grand Rapids.

JAS. F. BREAKEY, Ann Arbor.

MISCELLANEOUS.

All meetings are held on Central Standard Time at the New Arlington.

The *Scientific Exhibit* will be found in the New Arlington.

The *Exhibits* will be found in the New Arlington.

All meetings will be called to order promptly on time.

Each member in attendance shall enter his name in the Registration Book, indicating the County Society of which he is a member. *Please do not fail to register upon arrival at the New Arlington.*

Only members who are registered are entitled to vote.

The ballot box for the election of *President* will be found at the New Arlington at the place of the General Meetings. The polls close at 12 o'clock noon, June 30th.

BY-LAWS—CHAPTER III, SECTION 5.

All papers read before the Society shall be its property. Each paper read *shall be deposited immediately with the Secretary*, but the author may also publish the same in any reputable journal not published in this State, provided the printed article bears the statement that it was "read before the Michigan State Medical Society."

ENTERTAINMENT.

The Profession of Emmet County will make ample provision for the comfort and entertainment of the visiting members.

HOTELS.

New Arlington (Headquarters)	\$2.50 to \$1.00
Cushman	2.50 to 3.50
Perry	2.50 to 3.00
Imperial	2.50 to 3.00

REDUCED RAILROAD RATES.

One and one-third fare for the round trip.

When conventions of regularly organized Societies are held in Michigan, at which *not less than one hundred persons* are in attendance, who present certificates issued by the lines of this and the Central Passenger Association, or lines of other Passenger Associations co-operating with the same, certifying that they have paid full fare of not less than 75 cents each to the place of meeting, the return of such parties is authorized at *one-third the first-class limited fare*, via the route traversed in going to the meeting, provided the rules are complied with and the Secretary of the Convention fills in the certificates at the point at which the Convention is held, certifying that the holders thereof have been in actual attendance upon the Convention.

Tickets for return journey will be furnished only on certificates dated not more than THREE DAYS before the date the Convention assembles, nor more than TWO DAYS after the first day of the meeting, and presented within THREE DAYS after its adjournment (it is understood that Sunday will not be reckoned as one of the three days either before the opening date or after the closing date of meeting), and all return tickets will be for continuous passage; no stop-over privileges being allowed on tickets sold at less than regular unlimited fares.

Blank Certificates are kept on hand by Ticket Agents of all lines in the lower peninsula of Michigan, and will be furnished by them upon application at the time tickets are purchased.

"No refund of fare can be expected because of failure of the parties to obtain Certificates."

A charge of 25 cents will be made at the meeting at Petoskey by Special Agent for each certificate issued by him.

DELEGATES TO ANNUAL MEETING

Michigan State Medical Society, at Petoskey, June 28, 29 and 30, 1905

County.	Delegate.	Alternate.
ALLEGAN	A. L. VAN HORN, Otsego	O. F. BURROUGHS, Plainwell.
BARRY	C. A. MCINTYRE, Hastings	J. W. RIGTERINK, Freeport.
BAY	WM. BISHOP, Bay City	J. W. GUSTIN, Bay City.
BENZIE	C. P. DOYLE, Frankfort	G. O. EDMUNDS, Honor.
BERRIEN	C. B. CHAPIN, Benton Harbor	E. J. WITT, St. Joseph.
BRANCH	S. SCHULTZ, Coldwater	H. W. WHITMORE, Quincy.
CALHOUN	A. J. ABBOTT, Albion	L. M. GILLETTE, Battle Creek.
CASS	WM. C. MCCUTCHEON, Cassopolis	D. A. LINK, Volinia.
CHEBOYGAN	CHAS. B. TWEEDE, Cheboygan	CHAS. B. MARKS, Cheboygan.
CHIPPEWA	C. J. ENNIS, Sault Ste. Marie	J. ROSENTHAL, Sault Ste. Marie.
CLINTON	S. E. GILLAM, St. Johns	O. B. CAMPBELL, Ovid.
DELTA	H. W. BANKS, Escanaba	W. J. LAIRD, Nahma.
EATON	CHARLES H. MEAD, Olivet	A. R. STEALEY, Charlotte.
EMMET	G. W. NIHART, Petoskey	GEO. E. REYCRAFT, Petoskey.
GENESEE	C. S. WHEELER, Flushing	A. S. WHEELOCK, Goodrich.
GOGEVIC	JOHN R. MOORE, Ironwood	GEO. L. LOOPE, Bessemer.
GRAND TRAVERSE	ALBERT H. HOLLIDAY, Traverse City	J. M. WILHELM, Traverse City.
GRATIOT	I. N. BRAINERD, Alma	STILES KENNEDY, St. Louis.
HILLSDALE	WALTER A. SAWYER, Hillsdale	BION WHELAN, Hillsdale.
HOUGHTON	W. P. SCOTT, Houghton	N. S. McDONALD, Hancock.
HURON	C. B. MORDEN, Pigeon	F. E. LUTON, Kilmanagh.
INGHAM	H. A. HAZE, Lansing	J. F. CAMPBELL, Lansing.
IONIA	C. C. DELLENBAUGH, Portland	F. W. BRALEY, Saranac.
ISABELLA	C. D. PULLEN, Mt. Pleasant	A. T. GETCHELL, Mt. Pleasant.
JACKSON	D. E. ROBINSON, Jackson	C. D. MUNRO, Jackson.
KALAMAZOO	A. H. ROCKWELL, Kalamazoo	P. T. BUTLER, Kalamazoo.
KENT	LOUIS BARTH, Grand Rapids	N. H. KASSABIEN, Coopersville.
"	T. C. IRWIN, Grand Rapids	E. B. STRONG, Byron Centre.
LAPEER	HUGH MCCOLL, Lapeer	GEO. W. JONES, Imlay City.
LENAWEET	R. M. ECCLES, Blissfield	D. F. DUMBAULD, Blissfield
LIVINGSTON	A. E. MCGREGOR, Fowlerville	H. C. HUNTINGTON, Howell.
MACOMB	JAMES YATES, Roseville	H. G. BERRY, Mt. Clemens.
MANISTEE	JAS. A. KING, Manistee	T. F. SPILLANE, East Lake.
MARQUETTE	C. F. MOLL, Marquette	H. S. SMITH, Negaunee.
MASON	E. P. THOMAS, Scottville	A. W. ABBOTT, Ludington.
MECOSTA	L. S. GRISWOLD, Big Rapids	JOSEPH MCNEECE, Morley.
MENOMINEE	C. R. ELWOOD, Menominee	EDW. SAWBRIDGE, Stephenson.
MIDLAND	W. T. MORRISON, Midland	E. J. DOUGHER, Midland
MONROE	JEROME VALADE, Newport	C. T. SOUTHWORTH, Monroe.
MONTCALM	F. R. BLANCHARD, Lakeview	W. P. GAMBER, Stanton.
MUSKEGON	J. F. DENSLOW, Muskegon	GEO. S. WILLIAMS, Muskegon.
NEWAYGO	N. DE HAAS, Fremont	F. HOLMES BROWN, Newaygo.
OAKLAND	C. M. RAYNALE, Pontiac	WM. McCARROLL, Pontiac.
O. M. C. O. R. O	H. W. KNAPP, Jolietteburg	STANLEY N. INSLEY, Grayling.
OSCEOLA	A. HOLM, Ashton	F. M. HUNTLEY, Reed City.
OTTAWA	W. S. WALKLEY, Grand Haven	J. A. MABBS, Holland.
PRESQUE ISLE	JOHN YOUNG, Onaway	D. C. HOWELL, Onaway.
SAGINAW	M. D. RYAN, Saginaw	J. N. KEMP, Saginaw.
SANILAC	J. S. LITTLE, Sanilac Centre	GEO. SIMENON, Marquette.
SCHOOLCRAFT	C. S. LAYTON, Blaney	J. M. SATTLER, Manistique.
SHIAWASSEE	COLIN MCCORMICK, Owosso	JOS. H. ELDRED, Chesaning.
ST. CLAIR	C. C. CLANCY, Port Huron	G. S. NEY, Port Huron.
ST. JOSEPH	THOS. J. HAINES, Three Rivers	W. C. CAMERON, White Pigeon.
TRI-COUNTY	E. B. BABCOCK, Kalkaska	W. B. WALLACE, Manton.
TUSCOLA	J. E. HANDY, Watrousville	W. C. MEREDITH, Caro.
VAN BUREN	J. C. MAXWELL, Paw Paw	N. A. WILLIAMS, Bangor.
WASHTENAW	WM. BLAIR, Ann Arbor	R. BISHOP CANFIELD, Ann Arbor.
"	JOHN A. WESSINGER, Ann Arbor	IRA D. LOREE, Ann Arbor.
WAYNE	E. S. SHERRILL, Detroit	A. D. HOLMES, Detroit.
"	WM. F. METCALF, Detroit	H. R. VARNEY, Detroit.
"	WILLIS S. ANDERSON, Detroit	B. R. SCHENCK, Detroit.
"	A. E. CARRIER, Detroit	H. W. YATES, Detroit.
"	F. W. ROBBINS, Detroit	C. G. JENNINGS, Detroit.
"	GUY L. KIEFER, Detroit	FLEMMING CARRON, Detroit.
"	C. W. HITCHCOCK, Detroit	JOHN N. BELL, Detroit.

Book Notices.

Under the Charge of

RAY CONNOR.

THE URINE AND FECES IN DIAGNOSIS. By Otto Hensel, Ph. G., M. D., and Richard Weil, A. M., M. D., in collaboration with Smith Ely Jelliffe, M. D., Ph. D. In one octavo volume of 334 pages. Illustrated with 116 engravings and 10 colored plates. Cloth \$2.75 net. Lea Brothers & Co., Philadelphia and New York, 1905.

In this volume, the authors have aimed to supply a compact, handy and trustworthy guide to the combined study of urine and feces. It is quite certain that these by-products of the human factory are much too little studied. If the present book helps to make careful investigations of these forms of excretion more common, it will have served an exceedingly useful function. The effort has been made to furnish the facts so as to be of easy access to the busy practitioner and still retain complete accuracy. The comparatively recent work in Cryoscopy has been included as well as the Pancreatic Reaction described by Mayo Robson and Cummidge, about a year ago. Nearly one-half the volume is given up to urinalysis.

The remainder of the book is devoted to the feces. This branch of physical diagnosis has been little pursued except by the specialists in children's diseases. Thanks, however, to the work of such investigators as Schmidt and Strassburger, the importance of the subject is beginning to receive recognition. The bacteriology of the feces is based largely on the work of Ford done under the auspices of the Rockefeller Research Fund, and his classification is followed. An index closes the volume, which is attractively gotten out and profusely illustrated.

THE AMERICAN YEAR-BOOK OF MEDICINE AND SURGERY FOR 1905. A Yearly Digest of Scientific Progress and Authoritative Opinion in all branches of Medicine and Surgery. Under the editorial charge of George M. Gould, A. M., M. D. In two volumes. Volume I, including General Medicine; Volume II, General Surgery. Two octavos of about 700 pages each, fully illustrated. Philadelphia and London: W. B. Saunders & Co., 1905. Per volume: Cloth, \$3.00 net; half morocco, \$3.75 net.

The 1905 issue of Saunderson's American Year-Book of Medicine and Surgery still continues to hold its high place amongst publications of this class. The material for these volumes is drawn from journals, monographs and text-books, both here and abroad, together with critical comments by competent editors on the various topics taken up. A general summary precedes each section, giving in a few words the most important advances made during the past year. The volume on medicine considers general medicine, pathology, *materia medica*, physiology, pediatrics, syphilis, etc.

The illustrations for this volume are insignificant in number and importance. This volume contains Dr. S. W. Abbott's last contribution to the department of hygiene in this series, completed just before his death.

The volume on general surgery contains not only surgery and anatomy, but also the more or less surgical specialties, such as gynecology and ophthalmology. The same plan of treatment is followed as in the preceding volume, but the illustrations are numerous and good. One need not coincide with all the views of the various editors as to the relative importance of things in order to fully realize the value of the work in keeping one in touch with what is going on in medicine and surgery. It is perhaps of special value in those fields where the reader is not at work, but of which he should know something. The labor of preparing such volumes is indeed enormous, and a high order of criticism is necessary to give them the highest value.

SAUNDER'S QUESTION COMPENDS. Essentials of the Practice of Medicine. Prepared especially for students of medicine. By William R. Williams, M. D. 12mo. of 461 pages. Philadelphia and London: W. B. Saunders & Company, 1905. Double number. Cloth, \$1.75 net.

This new volume of the series is an unusually good one. The arrangement of the material is good and a surprising amount of valuable information is condensed into relatively few pages. The writer shows his experience as a teacher of medical students in the clearness and conciseness with which everything is presented. While of course nothing new is given, still the main features of the various diseases are considered and properly emphasized as to their relative importance. The book can be highly recommended to such as need this kind of work in preparing for examination and quiz room.

MALFORMATIONS OF THE GENITAL ORGANS OF WOMEN. By Ch. Debierre. Translated by J. H. C. Simes. $5\frac{3}{4} \times 8\frac{1}{4}$ in.; 182 pages; 85 illustrations. Philadelphia: P. Blakiston's Son & Co, 1905. Cloth, \$1.50 net.

No phase of teratology has been more carefully worked out, in its relations to embryology, than have the malformations of the genital organs. The literature on the subject is voluminous, but much of it is inaccessible. This book covering the anatomy, embryology and malformation of the female organs is a translation from the French, which has been made "in order to fill a void in English medical literature."

While it contains no new facts, it is a welcome addition to one's library, for it gathers together in small space and logical sequence the main facts relating to the subject.

B. R. S.

Progress of Medical Science.

MEDICINE.

Under the Charge of
HARRISON D. JENKS.

The Present Limitations of Serum Therapy in the Treatment of the Infectious Diseases.—The bacteria concerned in the production of the specific infectious disease fall into three classes. First, those which, like the bacilli of diphtheria and of tetanus, produce a virulent, real toxin which is set free in the culture media. Second, those bacteria which secrete but little or no free toxin but do contain a powerful endotoxin which is partly liberated only on the death and disorganization of the bacterial cells; good examples of this class are the pneumococcus, typhoid bacillus, the streptococcal, etc. Third, those bacteria that produce no free toxins nor have in the bacterial cells endotoxins of any power, but in which the cell plasma contains other poisons in addition to the protein poisons common to all bacterial cells. The most important member of this group is the tubercle bacillus. Against the first group the antitoxic sera are available, but their success depends largely on the interval of time that has elapsed since the infection began, for the antitoxin can bind only such toxin as has not yet had time to enter into combination with the body cells. In tetanus the poison becomes fixed in the central nervous system so rapidly that the serum has little chance for effect. The difficulty with the anti-bacterial sera is that the body's supply of alexin is very small, so that theoretically the injection of the serum should be accompanied by an additional dose of fresh normal animal serum to supply this deficiency; an impracticable procedure. The attempts to treat one disease by means of the antiserum of another, as has been attempted by injecting diphtheria antitoxin in pneumonia and cerebrospinal meningitis is repugnant to the principles of scientific serum therapy and tends to discredit its principles. The use of Moser's antistreptococcus serum in scarlet fever in the Vienna hospitals has not given results equal to those obtained by the author in the Riverside Hospital, following the classical lines of treatment. The introduction into the body of a child of the large amounts of serum required by Moser's plan is also objectionable owing to a possible hemolytic action.—(H. W. BERG, *Medical Record*, May 6, 1905.)

Some Remarks on Physical Diagnosis. (1) **Transmanual Auscultation.** (2) **Ulnar Palpation.**—Transmanual auscultation consists in auscultating through the hand placed over the heart. This method can be used satisfactorily only with one of the newer binaural stethoscopes. Heart sounds and heart murmurs can be heard with surprising distinctness through the hand placed on the precordia. The method greatly facilitates the timing of a murmur, inasmuch as the palpation and the auscultation are done at the same time and place. It is not only possible to auscultate directly through the fingers and hand, but almost equally good results can be obtained by placing the finger, flexed at a right angle, on the apex beat, and then resting the stethoscope lightly on the finger. The principal advantage of transmanual auscultation will be found in differentiating presystolic from systolic murmurs. It is also of value in timing peculiar murmurs heard over the entire precordia, or perhaps the entire chest. Ulnar palpation is done with the ulnar side of the hand, and confines the examination to the individual interspaces. The ulnar side of the hand is laid in each interspace successively, while the patient counts "one, one, one;" "one, two, three;" or "ninety-nine," according to individual preference. The ulnar surface of either the hand or the little finger must be firmly placed in the interspace, the hand being held almost at a right angle with the patient's chest. It is best to stand a little to the side of the patient and use the same hand for both sides of the chest. The method gives accurate information and enables one to discover small shades of difference in the fremitus of contiguous interspaces and of corresponding areas on the two sides. It is of most value in the diagnosis of effusions, especially in determining the upper level of the exudate. It is practiced most successfully on the front of the chest. On the back, by reason of the difficulty in locating the interspaces, it is not so satisfactory, but it may be employed even there. This method is not offered as a substitute for the one now in vogue, but as an addition to it. Both should always be employed.—(DAVID RIESMAN, *American Medicine*, April 22, 1905.)

NEUROLOGY.

Under the Charge of
GUY L. CONNOR.

The Relation of the Cervical Sympathetic to Epilepsy.—The function of the cervical sympathetic is to control the muscular action of the cerebral blood vessels; to transmit impulse from the stomach, intestines and lungs; and to innervate the dilator muscles of the pupils and the unstriated muscles of the eyelids.—(HOPKINS, *New York Medical Journal*, March 5, 1904.)

The probable theory of epilepsy is that there is some circulatory disturbance in the brain. The cervical sympathetic ganglia contain the vasoconstrictor nerves and the excision of these structures prevents vascular spasm and therefore the lumen of the blood vessels is permanently dilated. This increases the nutritive supply to the cerebral nerve cells. As a result of this increased blood supply, toxic substances are also more readily removed from the brain tissue.—(HOPKINS, *New York Medical Journal*, March 5, 1904.)

According to Winter, 6.6 per cent. of the 122 cases that were well observed, were cured; 13.9 per cent. of them were preliminarily cured (not under observation long enough to permit a positive statement of a permanent cure); 18.9 per cent. improved; 54.9 per cent. not improved; 5.7 per cent. died.—(*Journal of Nervous and Mental Diseases*, April, 1905.)

Spratling and Park report three cases of epilepsy on which Park did a bilateral sympathectomy. The sympathetic nerves and ganglia which were removed received a thorough histological examination. They found the following changes, none of which does Spratling consider the lesion of epilepsy, at least not until more work is done on this subject.

1. Pigmentation of a greater or less number of nerve cells of the cervical ganglia in all three cases.
2. Presence in all three cases of at least one cell with a double nucleus in some one of the extirpated ganglia.
3. In one case a focus of inflammation, i. e., of perivascular round cell infiltration.
4. Degenerative changes in the medullated nerve fibres in the sympathetic cord and ganglia of the excised portion in two cases.—(SPRATLING and PARK, *Journal of Nervous and Mental Diseases*, April, 1905.)

Arteriosclerosis in Its Relation to Diseases of the Nervous System.—The etiologic factors which produce arteriosclerosis may be best considered under the headings, mechanical, infectious and toxic. Under the mechanical factors must be considered all those conditions which induce abnormally high blood pressure, such as physical overwork. It is noticeable that it is much more commonly caused when the blood pressure is raised to a high point sporadically. Infectious agents usually act through the formation of bacterial emboli or thrombi from which infection of the vessel walls extends. Toxins are doubtless the more common and important etiological factors concerned in arteriosclerosis. Certain of the toxemias are of infectious origin (diphtheria and chronic tuberculosis). In other instances the poisons are autogenous, as in habitual constipation, over-alimentation or in malnutrition. The more common toxic conditions are those occurring in alcoholism, chronic nephritis, lead poisoning, gout, rheumatism, and syphilis.

Studying the various diseases of the nervous system as resulting from arteriosclerosis the most frequently observed are apoplexy, whether due to occlusion of the vessels or hemorrhage, general paralysis of the insane, multiple sclerosis, cerebral atrophy, and cerebral syphilis.

In all cases of arteriosclerosis we must look for the predisposing cause. The kidney and heart should be carefully examined. Overwork, overeating, sedentary habits and the use of alcohol in excess must be modified. If a specific history is obtained, large doses of the iodides, especially in the early stages of the disease, should be given. In cases with a high tension pulse, thyroid extract is used. In old cases of atheroma, the writers use iodide of potassium, grs. 5 to 10 with thyroid extract, grs. 5, two or three times a day. In syphilitic cases with high arterial tension, nephritis, and cardiac hypertrophy due to alcoholic excesses, overwork, etc., much relief is obtained by the continued use of digitalis and nitro-glycerine combined in conjunction with iron. Calomel in small doses, gr. 1/10. to i. is. to be given frequently. Proto-iodide of mercury in 1/6 grain doses three times a day is to be used whether the case is syphilitic or not.—(E. D. FISHER and H. BROOKS, *The Journal of Nervous and Mental Diseases*, May, 1905.)

SURGERY.

Under the Charge of

MAX BALLIN.

The April edition of "*Annals of Surgery*" is given up to the study of hypertrophy of the prostate.

Pathology of Prostatic Hypertrophy.—1. Pathologically there are three types of prostates causing urinary obstruction: (a) The large, soft type, (b) the hard, small contracted type, and (c) the mixed type.

2. Infection does not influence the variety of the pathological change.

3. The contracted form of prostate is not a secondary stage of the large, soft type of hypertrophied prostate, but is distinct from it.

4. In many cases of hypertrophy of the prostate there is present a true muscular hypertrophy.

5. Gonorrhœa is not an important etiological factor in the production of this disease, and there is no necessity for assuming it to be.

6. Hypertrophy of the prostate results from glandular overgrowth, influenced by the degenerative changes of old age, and other agents which tend to produce the formation of fibrous connective tissue in an actively functioning gland.—(PAUL MONROE PILCHER).

The Catheter in Prostatic Hypertrophy.—The catheter still has a field of usefulness in those cases which need a catheter only once or twice a day, and are kept in perfect comfort by its proper use. When catheterism becomes difficult and therefore unsafe, or if infection of the bladder, pain and frequency of urination occur, the time for catheter palliation has passed, and the time for operation has come.—(PAUL THORNDIKE).

Prostatism Without Enlargement of the Prostate.—Contracture of the neck of the bladder is frequently the cause for vesical obstruction and all the symptoms, commonly called prostatism, and usually attributed to hypertrophy of the prostate.

Contracture of the neck of the bladder is, in substance, a fibroid stenosis of the vesical orifice. It may occur in the young as well as in the aged.

Diagnosis of this condition is to be made, if we have to deal with complete or incomplete retention of urine, in a patient presenting a normal urethral length and a prostate normal to rectal touch. (Tabes and other central lesions have to be excluded.) Treatment should consist of division of the contraction by means of the author's galvano-cautery through a perineal opening.—(CHARLES H. CHETWOOD.)

Suprapubic Prostatectomy.—It is radical; no important vessels or nerves are cut; the urethra is not injured. Wounding of the rectum must be extremely rare. Palpation and inspection of all parts of the interior of the bladder are easy and accurate, and one may thus gain, as in no other way, a perfect understanding of the mechanical conditions which cause the obstruction. Having decided upon suprapubic section, there is no need for pre-operative cystoscopy; in other operations upon the prostate cystoscopy is practically a necessity. There is an almost total absence of shock, and the patient may be out of bed in 48 hours. No part of the urethra having been removed, treatment by the passing of sounds is avoided. Drainage is procured by siphonage and without perineal counteropening. The operation may be easily performed under nitrous oxide anaesthesia. The operation may be performed in two stages, which may be of enormous value in haemorrhage, in uraemia, or in grave spasms of the bladder when catheterization is difficult or painful or dangerous. Speed is a most important element in the surgery of the aged, and the method here described is by far the quickest of those recommended for the relief of prostatism. Lastly, but far from least, impotency rarely supervenes.—(HOWARD LILIENTHAL.)

Conservative Perineal Prostatectomy.—I have come to the conclusion that for most cases perineal prostatectomy is the safest and surest and quickest method of curing the patient, that whereas the Bottini method is the simplest and quickest for a certain limited number of cases, which can best be determined by the cystoscope, it is not so safe, and nothing like so uniformly sure of relieving the obstruction as the perineal enucleation. The suprapubic route may be used in certain large intravesical lobes.—(HUGH H. YOUNG.)

Removal of the Hypertrophied Prostate.—I am inclined to the conclusion that, as a rule, for the removal of the hypertrophied prostate, the method of free curved transverse perineal incision, with full exposure of the gland in the wound of operation, is to be preferred.—(LEWIS STEPHEN PELCHER.)

GYNECOLOGY AND OBSTETRICS.

Under the Charge of

B. R. SCHENCK.

Value of the Cystoscope and Ureter Catheter in Surgical Affections of the Kidney.—After giving the advantages of the cystoscope, Brown states that as a means of diagnosis the ureter catheter is valuable (1) by reason of what comes through it; (2) by reason of its service as a sound; (3) by its use as an X-ray landmark, with which to compare other shadows or questionable tumors. The most gratifying results are obtained in cases of tuberculosis, on account of the accurate and early diagnosis which can be made. In three cases of renal tuberculosis, no abnormality was seen in the ureteral opening on the affected side, while the catheter secured urine containing tubercle bacilli. Subsequent nephrectomy demonstrated the accuracy of the diagnosis.

Among the least satisfactory results were those in instances of renal hematuria, although the doubtful source of the bleeding was determined in all cases. The etiologic factor in more than 50 per cent. was not made out, despite most careful research by means of inoculation, cultural and X-ray methods. Such negative results supported the theory that the hemorrhage came from new growths and this diagnosis was verified in 80 of the cases.—(*Medical News*, March 11, 1905.)

Calculation of the Date of Delivery in Pregnancy.—Caie states that there is no absolutely sure method of determining the date of delivery and gives the conditions which may cause error. The length of gestation has been differently stated by different authorities, Duncan, 278 days; Schlichting, 273.2 days; Oldfield, 281.6 days; Löwenhardt, 279.8 days; Hassler, 280 days; Montgomery, 276 days, and Edgar 280 days, making an average of 278.3 days.

Employing the method of Naegele (counting back three months from the date of onset of the last menstrual period, adding seven days and counting a year forward) Caie kept records of 200 cases. In 53.7 per cent. labor occurred 3.4 days before the expected date; in 24.5 per cent. labor took place on an average of 1.8 days after the estimated time, and in 16 per cent. the estimated date was exactly correct. It is thus observed that the percentage of labors occurring before the estimated date is far in excess of those occurring after, and the author argues that the number of days added in Naegele's method is too great. In 50 cases calculated by Löwenhardt's method (multiplying by ten the number of days between the last menstrual period and the one preceding that) the date of the delivery was within 1.6 days of the estimated time.—(*Review Am. Med.*, March 11, 1905.)

Prophylaxis in Pregnancy and Labor.—Rogers contributes a paper on this subject. From the beginning of pregnancy the patient should be under the observation of her physician. The urine should be examined monthly so that renal insufficiency if present may be early recognized and treatment instituted. The hygiene of the patient's surroundings is of the greatest importance. Fresh air, both day and night, with exercise in the open air is beneficial. Frequent warm bathing is necessary to maintain a healthy condition of the skin. Plain, nourishing diet is called for, and the occasional use of laxatives. During the last few weeks of pregnancy the breasts should be examined and retraction of the nipples or tenderness of the skin relieved by appropriate measures. An alcoholic wash of tannic acid is good to toughen the nipples. Such simple measures will conduce to the comfort of the mother. The first warning of renal complications may be found in a low specific gravity of the urine or small quantity, with perhaps the presence of albumin. If albumin is found it is a most important danger signal and demands that energetic treatment be at once instituted. Examine the urine microscopically for the presence of casts which will indicate the condition of the kidneys. The diet of the patient in this condition of renal insufficiency should receive careful attention. Meat and eggs should be eaten sparingly if at all. Water should be drunk freely. If toward the end of pregnancy, a milk diet should be established. Saline laxatives should be used, also hot baths that the system may be relieved of excrementitious matter, the products of metabolism, and the skin maintained in a healthy condition. Extra work must be removed from the kidneys as much as possible and the renal circulation stimulated.

When entering the room of the woman in labor the physician should realize the tremendous responsibility which rests upon him. Two lives are entrusted to his keeping. The prospective mother lying in pain and helplessness trusts herself to him. The fate of her child also is in his hands. How often this trust is basely betrayed! Certainly not with malicious intent. But none the less deadly is the criminal carelessness of many who attend a lying-in woman, and without any care, sometimes without even a hasty washing of the hands, go about their important work. The careful attention to the rudimentary rules of surgical cleanliness would save many lives.—(*New York Med. Jour.*, April 15, 1905.)

DERMATOLOGY, SYPHILIS AND CUTANEOUS RADIOTHERAPY.

Under the Charge of

A. P. BIDDLE.

A Multiple Vaccination Shield.—Wm. P. Swett advises multiple vaccination, the scarifications being placed in a square an inch and one-fourth apart. On the sixth or seventh day the dressing, consisting of four bunion plasters suitably trimmed and sewn together, is put on.—(*Medical Record*, April 22, 1905.)

Laboratory Diagnosis of Smallpox.—R. L. Thompson, St. Louis (*Journal A. M. A.*, April 1905), comments on the difficulties in the early diagnosis of smallpox and suggests the use of laboratory methods. A rapid method of paraffin imbedding recently described by Henke and Zeller is recommended by Thompson as specially available. It consists in using snippings from the lesions by fixation in pure acetone for from three-fourths to one and one-half hours and then directly transferring them to paraffin at 56 C. The subsequent treatment is that of any paraffin material; applying with the dropping bottle successively, xylol, absolute alcohol, thin celloidin, 95 per cent. alcohol, and water to the sections and then using the hematoxylin-eosin stain. The whole process requires about three hours, and the specific skin lesions and smallpox bodies can be observed. He considers that by this method fewer mistakes will be made by a microscopist of reasonable skill in smallpox diagnosis than in the ordinary microscopic tumor diagnosis.

Tuberculous Testicle and the X-Ray.—W. B. De Garmo reports the case of a man of 56 years who shortly after having one testicle removed for tuberculosis disease developed a similar condition in the other organ. As he was unwilling to have the operation repeated, X-ray treatment was tried. One hundred and twenty-six treatments of ten minutes each were given between November 3, 1902, and September 14, 1903. A medium tube was used at a distance of about ten inches. The first application relieved the pain. The swelling and tenderness also gradually subsided until at the time of the last treatment the testicle was apparently of normal size and in normal condition.—(*Medical Record*, April 15, 1905.)

Destructive Skin Diseases, Epithelioma, Lupus Vulgaris, and Syphilis.—Henry W. Stelwagon (Philadelphia) directs attention to the diagnostic value of ulceration, scarring, or both, as a factor in chronic skin diseases, and

especially when the disease is of limited area, as it points in an overwhelming majority of cases to either epithelioma, lupus vulgaris, or syphilis; the smallest proportion of such cases belong to lupus. Many of the so-called lupus cases reported in the various journals in the past several years by those unskilled in dermatologic differences, in connection with Röntgen-ray reports, were, if the histories were correct, examples of the rodent ulcer type of epithelioma, and some, examples of the tubercular syphiloderm. In some instances this conclusion was confirmed by the accompanying photographs. Apparently, a diagnosis of syphilis is often only made when a clear or suspicious history is obtainable, or the patient's virtue doubtful, whereas the fact is that women not infrequently contract the disease innocently from their husbands, may have mild or overlooked secondary symptoms; and further, that cases of extragenital chancre, whose nature may not have been recognized, are not at all uncommon, and the cutaneous disturbances following may be misinterpreted. In epithelioma the best plan of treatment is the removal of the morbid tissue by incision, curet supplemented by caustic application, or by caustic alone, according to the individual case; this treatment to be supplemented by Röntgen-ray exposures. While Röntgen treatment alone will frequently suffice, it is in many instances tedious, and often stops short of complete cure, and except in particular cases should not be advised as the sole method without stating to the patient the probable tediousness and the possibility of stopping short of complete removal. In lupus, the most rapid results may be obtained by the destructive methods mentioned, followed by the Röntgen ray. But Stelwagon believes the Finsen-light treatment, and the treatment by caustic pyrogallol or arsenical salves followed by the Finsen or Röntgen-ray treatment, to be the most valuable. The Finsen treatment is valuable, but it is expensive, tedious, and its application requires a trained assistant; and in many instances the Röntgen ray will do the same and with much less trouble. In late syphilitic ulcerative or nodular eruptions the ordinary mixed treatment is usually quickly successful, but in some instances, and especially when the eruption is seated about the nose or the palm, the malady is rebellious and inunctions must often be resorted to before the disease yields.—(*American Medicine*, April 22, 1905.)

THERAPEUTICS AND PHARMACOLOGY.

Under the Charge of

W. J. WILSON, JR.

Poisoning by Potassium Cyanide.—The minimum lethal dose of cyanide of potassium varies, according to the different authorities, but is generally fixed at from 2 to 5 grains; Bennett reporting two cases with fatal results after taking 2 grains and 4½ grains, respectively. Death does not occur as rapidly in cases of poisoning by potassium cyanide as in cases of hydrocyanic acid poisoning, usually not taking place for from fifteen minutes to an hour after the ingestion of the drug. Cases are reported, however, in which death has taken place in less than ten minutes. Casper-Liman reporting a case in which the drug was taken with suicidal intent by a young woman 20 years of age, death occurring immediately. Valcourt and Haskins mention cases in which death resulted in two and five minutes respectively. The mortality in cases of cyanic poisoning is high, Withans stating that in 455 cases, 382 or 84 per cent. died. Death in these cases is due to paralysis of the respiratory center, although it would appear that in some cases it is caused by the depressant action of the drug upon the heart itself.

That recovery frequently takes place, even after the ingestion of large doses, is shown by cases reported by Higgins, Wiglesworth, Stevenson, Quintin, Brockett and Gillibrand, in which from 19½ to 50 grains of cyanide of potassium have been taken, the patient in each case recovering. While death takes place more slowly, in fatal cases of cyanide of potassium poisoning than in fatal cases of hydrocyanic acid poisoning, recovery is more delayed in these cases than in these of hydrocyanic acid poisoning. Unconsciousness generally persists from two hours to six or eight hours, Dobson, Quintin and others reporting cases in which the period of unconsciousness extended over this length of time and one remarkable case is reported in which the unconsciousness persisted for three days, the patient not being discharged from the hospital for ten days. In the other cases cited the patients have usually been discharged in from three to four days.

Autopsy has usually shown the left ventricle of the heart empty and firmly contracted, the right containing uncoagulated blood. The stomach is frequently found much inflamed, especially toward the pyloric end. The lips, mouth and stomach at times show evidences of corrosive poisoning, probably due to the carbonate of potassium used in the manufacture of the cyanide of potassium.

The most important factor in the treatment is the promptness with which it is instituted. Immediate evacuation of the stomach and intestinal canal, the administration of cardiac and respiratory stimulants, artificial respiration, friction of the extremities, and cold effusions to the spine, with the patient in a warm bath, or the use of the alternate hot and cold douche to the spine, offer the best results. Various drugs have been suggested as additions to water in washing out the stomach: hydrogen peroxide, potassium permanganate, feric and feirous salt in combination; carbonate of potash in solution or in combination with sulphate of iron and ether. Of these probably the best is permanganate of potash, the use of which is recommended by Kossa and other writers. Witherstone calls attention to the article of Heim, in which the author states that morphine seems to be the antidote to cyanide of potassium, and vice versa.—(MCKELWAY, *The American Journal of the Medical Sciences*, April, 1905.)

Treatment of Tetanus.—In the treatment of tetanus prophylaxis plays an unimportant part. Every wound should be treated on antiseptic lines, but this treatment is not sufficient to destroy the bacillus of tetanus, which possesses great resisting power to the ordinary methods of destruction. We know that the bacilli live, multiply and generate their specific poison in the wound itself and in the immediate locality. Therefore our duty is on the first manifestation of symptoms to remove the site of inoculation when possible by the knife, otherwise by the actual cautery or by scraping, and in every case swabbing out the wound with pure carbolic acid. After this, antitetanic serum should be injected under the skin of the abdomen in large doses, 20 to 30 cubic centimeters, and repeated daily for a week or ten days. Cocaine should be injected hypodermically morning and evening, commencing with one-sixth of a grain and gradually increasing the dose according to the severity of the symptoms to one grain chloral hydrate and potassium bromide; 20 or 30 grains of each every four or six hours, appear to me to be the most likely drugs to give beneficial results in producing sleep and relieving the irritability of the motor nerve cell of the brain and spinal cord. Other details in the treatment, such as absolute quiet in a darkened room, the administration of chloroform for relieving severe tetanic convulsions or for passing the feeding tube or catheter, and the choice of suitable aperients, need no comment.—(COLLINS, *The Lancet*, April 15, 1905.)

BACTERIOLOGY AND PATHOLOGY.

Under the Charge of

H. S. OLNEY.

Growth of Cancer.—Bashford thinks too much attention has been paid to the questions of the nature and origin of cancer and not enough to the cause of its limitless growth. All theories of origin have one shortcoming in common—they fail to show how the actual continued cell multiplication is maintained. He attempts to study the various phases in the development of cancer by artificial propagation in mice. The age incidence of cancer varies in direct relation to the absolute duration of life, so that while in man the maximum incidence is after the 45th or 50th year, in the mouse it is after the second year, and hence in that animal if it could be artificially propagated, the whole cycle of development could be studied. He argued that "just as the period of gestation varies from 21 days to 9 months in the case of the mouse and the human in accordance to laws which govern their respective developments, so, if there be stages in the growth of cancer they may also be adapted to the compass of life in different animals and be gone through more quickly for the mouse than for man."

He found that under favorable experimental conditions the growth was of the same nature as sporadic cancer, and was of enormous and apparently limitless amount, and due to a continued proliferation of the parenchyma cells. There is a constancy both in the histology and in the minute cell characters, so that the cell proliferation proceeds by typical bipolar mitosis, and the various forms of irregular cell division which occur in human tumors do not occur, except that at recurring intervals, which coincide with the reappearance of other phenomena, there is a mitosis which distributes exactly one-half the normal number of chromosomes to the daughter nuclei (such as he has previously described in human cancer cells). The balance of evidence is in favor of the growth being interrupted and not uniform and continuous.

The span of life of the individual is not the same as that of the separate organs and tissues, for some organs early attain full development and then disappear; others are only active during adult life, etc. So cancer attacks the various organs at different stages of the individual's existence. Thus the chorion has a short life and chorionic epithelioma appears at an interval after fertilization which corresponds to its old age stage of proliferation. The mammae and uterus

mature slowly and are longer active, and carcinoma is more common during their involution. Chronic irritation hastens the senility of any particular tissue by the excessive cell proliferation induced.

The view that unbounded growth of cancer follows on terminal phases of normal cell multiplication in consequence of nuclear fusion, makes the age incidence of the disease a necessary consequence.—(*The Lancet*, March 25, 1905.)

Morphology of the Tuberculosis Germ.—Craig thinks that the organism which causes tuberculosis should not be classed as a bacillus, but should rather be placed under actinomycetes, because so many cases exhibit other forms than those of a true bacillus. He has preserved 509 specimens of sputum, most of them being from soldiers invalided home from the Philippines, and he has been especially struck with the diversity of form shown by this organism. He thinks the moisture and heat of the tropics may be responsible for the luxurious growth, and for the wide variation in its morphology, as such variations are seldom met with in temperate climates. He has observed differences in length, breadth, contour and staining reaction, and describes some of the more common departures from the classical type.

1. The streptococcic form, in which stained portions alternate with unstained and resemble a chain of cocci. This is not the same as the "beaded" form, for in the latter the interval between the stained portions always shows a narrow rim of stain connecting them.

2. Clubbed forms, in which one end is enlarged and stains deeply.

3. Budding forms, in which distinct lateral projections or knobs occur in one or more portions of the rod. He found them in fully two-thirds of his cases.

4. Branching forms, in which true branching occurs. The branches develop from the buds seen in the budding forms, and resist decolorization much more effectively than the unbranched forms. He has found them in over 80 per cent. of his cases from the tropics. The branches may in turn bud and develop secondary branches, so that an interwoven mass similar to an actinomycotic growth may be the result. He thinks the name *mycobacterium tuberculosis* is a good name for the germ of tuberculosis.—(*Craig, Medical News*, February 25, 1905.)